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<110> Patrick J. Dillon et al.

<120> Nucleotide Sequences of Escherichia coli Pathogenicity Islands

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 tcttgttata cac 1213

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 <211> 451
 <212> DNA
 <213> Escherichia coli

<220>
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 <222> (437)..(437)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n equals a, t, g, or c

<400> 8
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 ggcgtcaaac tcttttatta actggatcat gtcagcagta tcgcgccaa ggggttcaag 180
 tttcttcacc aagatgacgt caccttcctc cacccatc ctcagcaagt ccagccctt 240
 ccgatcgctt gaactgcccgt atgccttgc agtaaagatg cgatttgctt tcacgcctgc 300
 gtctttgagt gcccgAACCT gaatatcgag agattgctgg ctgggtgata cccgtgcgt 360
 accaaaaagt cgcataaaaaa tgtatccyaa atcaaataatc ggacaaggcag tgtctgttat 420
 aacaaaaaat cgatttnaat tagacaccnt t 451

<210> 9
 <211> 720
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (621)..(621)
 <223> n equals a, t, g, or c

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 gtgtatccag aagtttctct ctccgaagct cgtacaaaac gggatgaggc ccgaaaactg 180
 atttcgagg ggattgaccc ttgcgaacag aaaagagcta aaaaagttagt ccctgattta 240

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tcacacagcg ataaaagtact caaaaggcctc gaaacacacg ttttcccctt tatcgcaac	360
cgggatataca caacactcaa tacccggat ctgcttatcc ctgttgcgtc tgcagaagct	420
aaacaaattt atgaaatcgc cagtcgtctg cagcaaagaa tatctgccgt aatgcgttat	480
gccgtacagt ctggcatcat cagatataat cctgctctgg atatggctgg cgcatgtact	540
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cgtattaaca gttataaaagg ncagcctgtc acccggcttg cggtgtatgc gaatttactg	660
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<211> 2920	
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<213> Escherichia coli	
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<222> (1)..(1)	
<223> n equals a, t, g, or c	
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<222> (3)..(3)	
<223> n equals a, t, g, or c	
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<221> misc_feature	
<222> (1250)..(1250)	
<223> n equals a, t, g, or c	
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tgcagattaa catcagggga aatgtttata tccccccatg caccattaat aacgggcaga	180
atattgttgt tgattttggg aatattaatc ctgagcatgt ggacaactca cgtgggtgaag	240
tcacaaaaac cataaggata tcctgtccgt ataagagtgg ctctctctgg ataaaaagtta	300
cgggaaatac tatgggagga ggtcagaata atgtactggc aacaaatata actcattttg	360
gtatagcgct gtatcagggaa aaaggaatgt caacacctct tacatttagt aatgggttcag	420
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cagtgcctt tcgtaatggc agcgggatac tgaatggcgg ggatttccgg accacggcca	540
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caacttagtg	ttaaa	agtaac	cga	tattgtt	caatt	catag	tggatataaa	ctccg	780	
agtacggcaa	ctttaa	agcta	tgtgg	cctgc	aatgg	atttta	cctggactca	tgrtctt	840	
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gccgg	gat	at	ctc	agtt	tata	cg	at	tttgc	at	1860
tttacc	ggat	gact	gtat	gcg	cg	tttgc	taca	cag	at	1920
aatg	aaat	ga	ata	acac	aga	cac	at	tttgc	aaat	1980
cccgc	at	at	ctt	cgg	aa	catt	tttgc	at	tttgc	2040
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tcctc	acc	at	att	tcg	ca	tttgc	caca	at	aaa	2160
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aagg	tat	gtt	ttt	tat	tat	tttgc	atc	tttgc	atc	2340
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cacattttc tcatgccagc tcataaagtgcgaaatatct gaggatgccg gatagttca	2460
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<221> misc_feature	
<222> (1677)..(1677)	
<223> n equals a, t, g, or c	
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gcataaaaat aagcatatgt aagcattttg gtttgctttt tttaacctgc caccgcaatg	180
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<210> 12
<211> 2676
<212> DNA
<213> Escherichia col

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<220>
<221> misc_feature
<222> (128)..(128)
<223> n equals a, t, q, or c
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<220>
<221> misc_feature
<222> (447)..(447)
<223> n equals a, t, q, or c
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<220>
<221> misc_feature
<222> (1100)..(1100)
<223> n equals a, t, q, or c
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<220>
<221> misc feature

<222> (2660)..(2660)

<223> n equals a, t, g, or c

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acgtnnaagt	cgcctctmaaa	ccaatataac tggaaactgcc attttagaat ttatcagaga	660
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<210> 13
<211> 1485
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (16)..(16)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (144)..(144)
<223> n equals a, t, g, or c

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<210> 14
<211> 22671
<212> DNA
<213> Escherichia coli

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<220>
<221> misc_feature
<222> (19750)..(19750)
<223> n equals a, t, g, or c

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<220>
<221> misc_feature
<222> (20174)..(20174)
<223> n equals a, t, g, or c

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<213> Escherichia col
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 cttccggcc tgagcgacat atccggccaa ctgtccatgt tcataccagaa cttcagaagc 1860
 cattggaggg ggattgccag tagacatacg aatatcaaata aacagacttc ttccctgttt 1920
 agtgtcaaata ttyactaacg tggcgctatt agcacgagga atgatttcct gctccgtcgc 1980
 cgataattca acattcaaata ctaaatttga gggatcgatg ctaatttgat ttttctcata 2040
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 attgatggca gccccctgag ctccttcagc atggataatg gcaaaaagtat cactcaggc 2160
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<210> 23
 <211> 2677
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (2522)..(2522)
 <223> n equals a, t, g, or c

<400> 23
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 atgtcccttcc tggtcactat gctgttcaac tccaaactct ctgacgatcc gatttatcgc 180

aagcgtctgg aagagggcct ggttgaactg cgccgtgaaa agcagattga aatcaaatcc	240
ggtgcaaaaa cgtccgtctg gctgttctg ctggcgtag ttggcgttgt tatctatgca	300
atcatcaaca gcccaagcat gggtctggtt gaaaaaccac tcatgaacac caccaacgca	360
atcctgrtca tcatgctcag cggttcaact ctgaccaccg ttatctgtra artcgatacc	420
gacaacattc tcaaytccag caccttcaaa gcaggtatga ggcgcgttat ttgtatcctg	480
ggtgttgcgt ggctggcga tacttcgtt tccaacaaca tcgactggat caaagataacc	540
gctggtaag tgattcaggg tcatccgtgg ctgctggccg tcatcttctt ctttgcttct	600
gctctgtgt actctcaggc tgcaaccgca aaagcaytga tgccgatggc tctggcactg	660
aacgtttctc cgctgaccgc tgttgcgttct tttgctgcgg tgtctggct gttcattct	720
ccgacacctacc cgacactggc tgctgcggta cagatggatg acacgggtac taccctgtatc	780
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cgtttccgtt tctttccgcg cgaactaacat cctttcccg tccgttgcgt agtgcattct	960
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ccgcattacg ccgaaacacg cggaaattgc cgacgtgcag ctggcccaag ggcgtctggca	1560
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cggtttctgt tatccgcccag aaacaaaaac cggtccgtta agcgaagtgg tcgccaacaa	1740
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tctggtggtt	gcccgcag	gkttacagtt	ccaggcggcg	ctacagmacc	catacgtgct	2040
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ggtttagcgtg	cgcacttc	aggattggc	atttggtgca	acacataccg	cgcaaactca	2640
gacgcacatctc	aactttacac	aatcaaaac	agtagat			2677

<210> 24
<211> 537
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (521)..(521)
<223> n equals a, t, g, or c

<400> 24	atcctgatga	cggcgtaaat	gtgcattgc	caggattgcc	gcatagaggg	cacgaagaaa	60
	aggtcggttg	tcaggatgta	tccagatgat	tctgccactg	aaaccttcag	ggataagacg	120
	attgccaact	gccagtcctt	taagggcagc	attcagcgcc	ttacgcgggg	cattctgctc	180
	cagaaatacg	tatgccaagt	gagcgtgtac	atcaataaaag	tcattctct	gtcgggcaag	240
	gcccctgagt	ttgttgatgt	aacttggttc	gctgatttca	tccgcacgt	atgcacatcaat	300
	cagttcttca	aactcatcca	gcaacgagcc	aaaccaggtt	tccggaaata	tgaaacagcc	360
	ctggttatcg	ttcacttcaa	agcgtaattt	gccagtcata	ttctgaacct	gtaaaaaaagg	420
	atagaccata	atctgcaggc	tataaaaatt	gtggatgcct	ggcatcggt	gtccttttat	480
	tgtccggat	taacgttgcc	catgataata	cagtgaatcc	ngttctgtgg	taagacg	537

<210> 25
<211> 1128
<212> DNA
<213> Escherichia coli

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<220>
<221> misc_feature
<222> (1074)..(1074)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (1079)..(1079)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (1115)..(1115)
<223> n equals a, t, g, or c

<400> 25
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tatctcaagt aacagttccg ttaaatctac cggtgggagt agctgttga tccgattatt 120
tagacgaagc aatgatggtg gctcttcctg tttctccaga caactgatag tcagggatgg 180
atatttacct tcattacaga tatgaacttc cgcattctt tcaaatcgtg atgccaggct 240
ttccaggtct catccagctg aatagccagt tggcacac cttaacgtcc atcgacaggg 300
tgtcccagtg cccgacagac aggaatacgc tgagtctgcc actcttcacc ttgcaacaac 360
ttctcgcgag gatctccccca gcgatcactg tttcaagcc cagatgtccc cggcggcga 420
rtgcacatcctg aaggcggttcc agcaaacata gtgaataacc tgcacgctgt atcccgccc 480
tccgcacatcgat atacgaggcg tttccaggaa ccgggtataaa tatgttcagc gcatcatcaa 540
ggatgcgcgtt tttcgaacca ttcagttctg ccagataatg aatcgacgcc agtacatgtc 600
acctgcgggt gccgcacgga aatgcaggc acgcacacc gccgaaagaa aacgtttaac 660
ccgaccgtac tgctcaacca tttcgtcatg gaaattatttgc ttctgtggac gagcaagtcc 720
attaaccttg ctacagatt ctgcgtct gttttgggt acgcacttga agataacctg 780
cctgagatct gggacatctg tattatcatc cagcaacaat gcacatgccc ggcggcgtaa 840
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tgcttcgcgg ataatgtcca gaatttagcat atcaagcaca tcaacggcat cgtctaattgc 960
cgttatttcc tggcgatcc cgaatgcagt aagtacagca agctttctt gctgtggcat 1020
tcgagcgata tattttaccg acgcacatgcc agcatgaacg agccagattt cgcnttggna 1080
atggtcaggc agaccggaa aagttccagt cgggnaaaac tccaagaa 1128

<210> 26

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<211> 2311
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (3)..(3)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (2008)..(2008)
<223> n equals a, t, g, or c

<400> 26
ggntgataaa aatcytttga tgaataacga taagccgccc agagttatat ttgtgtttga      60
ggctggaata ttgatgctat aacttgagtg cagactataa ccttacgcg ttacaccgga      120
ataacctgaat gctgttctgg acaatgtaat gtcagatgct atagcaccca gatgggtatt      180
aaaggccagg ccagctaacc ccgctgtata tcctgaagct gtggtaagac cactgtttaa      240
agtaatatca ttcgtcaggc cgtattgata ggtgccttgt gctattaaat cattatatgt      300
tttattcgca taacgatact ttcccactga catttgccag cgactaaatc cgggacgaat      360
gagttgagca acggccgcaa aaggaaccgt gaacattcgt gtctggccat tagactctgt      420
tatcttaacg agaaggtcac cagcatatcc actgggatataaattcattga tgacaaatgg      480
tccggctggc accgtcgaaa catagaggat atgagcattt tgataaatgg ttacttttagc      540
attactgtta gctattcccc ggacagcagg rgcatagcccgtaaaagaac cggtaacat      600
tcgttcatcc gatgctaacc tgactccccg caaaactgagg ctatccatta gctcaccatt      660
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tgtttctata ttctgatatac cggcaggata gctattatttc cagctctcac tgccacggtg      780
gchgcaaaagcc atccccacaa attgaatcca gcttttaatcc cagataagt ctgttcgtt      840
ctcgtccccgg aagagctata ctggtaatag ttagcatcat agttataaaa tgctgcaggaa      900
acaccacttt gccactgaga aggggaaata tattcttttg gacgtgtatt cagcagtgt      960
gcgggatttc gatattcaac cttaaagtgc ataagtcaaa attaattctg gctgaagaaa     1020
gcctgttga cgccggaaag caggagggtgt ttcccgacat agtacatttg actaaatcaa     1080
tcaatgaaag cagctcaggc gtcaggcata acgtcggagc accggatttg gcagtacgtt     1140
aataactgcaa atcagcattt ccattccata cattattaac ataaatatca gaataatacc     1200
tgccctcagg cacagggtaa ccatgactaa agcggcggat atcaatagca tttatccctt     1260
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ttactgttaa ccctaattgca gcaaaaagca gaagagaaca acgacagtaa atcaggcatg 1380
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 ccgtaatcat taacaataac ccagggaaact ttgctggtgg cgccaggctcg ccttaagtg 1500
 caaatactgt tgaagagaaa gggggaaatca ttccaccatg ttcaacaggc gttaagtgc 1560
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 taattcggcc ttccctcctgg tgccaggtaa ctccagata agcatcattt ggtgttaact 1680
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 ccagaacatt tagatagaaa agagatttc ggtcttcgg tagtgcactcg cctgtatata 1860
 caattctgac tgggtgtcct gattnaggt ccatacgaaa tattggcgg a taaatgataa 1920
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 aatgccgaga tttcattgtc attattttaa cgtatgctaa tactctttg agtcgcccgg 2040
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 gtaaaaaaaaa acagcacaaa ccttagcatg gtatctccag aagaaagcag ggcagtattt 2160
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 gcattaccat ccccaccaat agtttcagaa t 2311

<210> 27
 <211> 1118
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (142)..(142)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (228)..(228)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (261)..(261)
 <223> n equals a, t, g, or c

<220>

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<221> misc_feature
<222> (693)..(693)
<223> n equals a, t, g, or c

<400> 27
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ttcctgcatt actgttataa agataaacga gtaaccatc agaagatgtg tttgatgtat 120
tctgaactaa aatagcattg tnataagtgt ttgttgcgt tatcgttaacc ttcattgttc 180
ccagattata gggacaccgc atattcacag taaactctt ttcgtgantt ccattttgac 240
tcagggtctg aatctctaca ncctgccagt caacagttgt gttgcttaca gtacaggcag 300
gaataatcag tttcctctg aaggtcagat tatcaactgc atgtacatgc tgagacatta 360
acactgcccc cagcattacc ggaagacaca aacctcttat cttttcatc tgaaatatcc 420
tgtacaaaaa ttttgctaac gatatgtcaa ttcaaacgtg gctgttgctt cataatcacc 480
gggtaccaca ctcttcgtcc gcagggcttc cggcgttgcc acaacatacg cgccgaaagg 540
aagctcaaga ctgttccgg taacctttc cccctggcct ttgttatggg aggtgccggg 600
tttcagcaga ctgctgccat cggtgccag cagtcaatg cctaaccggc cagcattcac 660
tccggttacc ttcaaatggc cggggagrcg cyntcttccg tccccttaaa ggtcagggtc 720
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ggcgaacgtc cggcggyata ccagaaatcc ctggacgccc gggtttggaa gacgacatgt 840
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acatctgagg ctattgcctg tccggcagac agtgcggcaa acagtaaaag agcgcctgtg 960
cttttatca tcacattccc ttactcatat tttatgctca gacgcagcat ggccggattg 1020
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ctcctcctgg cggcggytaa ggcggggaca gtaaaaaaa 1118

<210> 28
<211> 562
<212> DNA
<213> Escherichia coli

<400> 28
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gccakgatcg ggataaaaacg tacaggcagc gataaacaga cagccggat agcggttgtt 120
tttaacgcac tccgataacg cctgataacg tgccagcaac ttttggcgg cggtttgcgt 180
ttcgtccagc atcagctgac gacgccagac atctatctgt tggcttaagat aacgcagcgc 240
atcgttagagg attgcctt tgcgtggcca gaagcggcgt actcgtccag tggataatcc 300

acacgttcag caaccatctc cagcgtggc ttggcaatcc cttgtaattc taataatttc	360
agggcttctc ccagtagatc ttcacgttgc acgctatttt cctccgkctt tcccactgca	420
atgttcgktc acgggtggcg atcgccaaa tgtgcgctgg aaggttcag catccataaa	480
gcccgtgacg cgtgcttgc gatgctcctg gccttggtcc ggtcaaaaaa gagaatttgt	540
ccggtagggc caaggatatt aa	562
<210> 29	
<211> 745	
<212> DNA	
<213> Escherichia coli	
<400> 29	
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cggtaagtac agataaccac aacataagct cattcagtaa attttatctc tgaacaaacg	120
actatggcat gctcatttat actattcata agaaagtgtg attatctgta agcattaacc	180
atcaaatcat ataaccatac taaactggcg gatcatcagc accattagca ggtaacttat	240
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gaatcatgaa caccattaa aattaccatc attaacatca tataaaaata tatttttact	360
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tttttgc当地 gtataaaaaa ttgaattcgc cacttttta cttattgctc ttttatactg	660
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<210> 30	
<211> 400	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (6)..(6)	
<223> n equals a, t, g, or c	
<400> 30	
gcgttnatgc atttcgasat tttccacttc gttctgacgt tgcactgctt tggcgtcatc	60
attacgttaac gtatcgagga aatcgaggta gccctgatca acatcttgg tgacgttagac	120

gccgttgaac accgagcatt caaactgctg gatatccgga ttttcagcgc gaacggcg	180
gatcagatcg ttcatcgatcc ggaaaatcaa cccgtcagca ccgtatgtct ggcgaaat	240
atcaacttcg cgaccgttag cgatcagtcc cgtggcgctc ggcataatcaa taccataaa	300
cgttcggaa agcgaatttc cggtgccgca gaagcgaggt acactttctt cgctccgg	360
tcgcgtgcca tctcgataat ctgtcagaag tggtgccac	400

<210> 31
<211> 824
<212> DNA
<213> Escherichia coli

<400> 31 tgtcgacgat gaggcagcca gagcattaga gccgaaaaga agggatgtat ccatgactgc	60
tgttgctata aaatgtttca tatattctcc atcagttctt ctggggatct gtgggcagca	120
tatagcgctc atactagggg tttgagggcc aatggAACGA aaacgtacgt taaggagata	180
attcgttgtt tatatttaaa ttttagagctc tcagttcccc ttttaaaata tcctctggca	240
acgtgaatgt ataatggccc aacatattga tatgcccgtg catcaggga gatagccgag	300
cgatataatttcc atctataatttcc tcttcgcccc tacggcgcat ccagctcaac gcttcctcca	360
tatagagcgt gttccacaga accactgcat tagtaaccag gcccagcgcc cccagttgtat	420
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cttcatcatc aatataatttcc aggagatata gctttttgtt tacacgccc acttccataaa	600
ttgcctgtgc cagtcctcgat gggcgcgagc ttttcagtaa agagcgaatg agttctgac	660
catgaattgt acccaacttc aggaaccaggc ggttcgcatc atctcatccc actgactctc	720
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<210> 32
<211> 911
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (841)..(841)
<223> n equals a, t, g, or c

<400> 32 acaaatcaga ccagttaacc agtcagtcgg ttttatgatt tcactcacta tactttgttt	60
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 cgacagaata ttagtggatcgta acatggatgtt ctcaacttat tgagacatat 240
 tgtctttttt acccatgtgg tcattttca tcccatccgt tttgctcatg tgttcttct 300
 ccattttctc tttatccatt gcattttgc acataaccatc cttgcacatt ttatcatgcg 360
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 cccccggaaa atgatttagtg acctctataa cctgaacatg cttgggttt ttatatccca 600
 gcttagtagg gatacgtatc tttatggat agccatattc ttttgcaat accctgttat 660
 tccatgtcaa tgtcagcaat gtttgtaat gtatgtctgt cgccatatac atactggtgt 720
 agtaaccatc gacgcaacga aaactgacgt atttgcccc catatggca ccaatcagcg 780
 tcagggaaatg ccggaaatggt atccctcccc attttcctat tgcactccat cttcaacac 840
 ngatatgacg gtttatctga ctcacatgt gcatgttata caattcagac caaaaaccag 900
 ttacgggtta t 911

<210> 33
<211> 463
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a, t, g, or c

<400> 33
ngggcagga taattgtatc ctgcccngta tataattctc agcacaggtg ttgactaaag 60
agcgtgaaac tttgcttata tgtcttcgtt agattcacgg acggttatac ttgagcctga 120
ttctgtgaag taaacaacag cagaagcatc gttgcctttt tcaatgtatg aaacattcca 180
gtcatggata gccactgcgg gctgaccatt atcccgacgg tgcgtcttaa tgaatcgccg 240
aagtaattct gcaatatcgt taaaaacacc atttacggta tgagtgatac caccaacgca 300

atgttagatga gttgactccg gggtatcatt gtctgcttct gcaaagagta tagctgtctt	360
gctaattgtta acaggcgccct gtgarcgaaa taattcgaga gaaataaaacc cggattctgc	420
cataaaaaact ccagtttgtg atgttatatac atttcataatg ttt	463

<210> 34
<211> 565
<212> DNA
<213> Escherichia coli

<400> 34	
ttctaacctc tgacaaaaaa cagaattacg gttgttatgc tgcagaacct aatgacgtgc	60
aactggcgcg ctatttcat cttgatgaac gggatctggc cttcattaac caacgacggg	120
gcaaacataa taggctggc attgcgttc agtcaccac agcccgtttt ctggaaacat	180
ttctgacgga tttaactcag gttctgcctg gtgttcaaca ttttgcgcg gtacagctta	240
atatccaccc tccagaagtt ctctcccgct atgctgaacg ggacactacc cttagagaac	300
atactgcatt aattaaggaa tattacggct atcatgaatt tggtgatttt ccatggtctt	360
tccgcctgaa gcgtctgcta tataccggg cgtggctcag taatgacgac cgggtctgat	420
gtttgatttt gccactgcat ggttgcattca aaataaggta ttactgcccc gagcaaccac	480
actagtagt ctcatcagtg aaattcgtga aagggcaaat cagcggctgt ggaaaaagct	540
ggccgcactg ccgaacaaat ggcag	565

<210> 35
<211> 512
<212> DNA
<213> Escherichia coli

<400> 35	
cgtggcgtc cggggtaac gccggataag tttaattttt ccggtcaggc aaaaggcatt	60
aatctgcaga tagctgatgt cagggaaat attgcccggg cagaaaaagt aatgcctgca	120
ataccattga cggtaatga agaagcgctg gattacaccc tcagaattgt gagaaacgga	180
aaaaaaacttg aagccggaaa ttatttgct gtgctggat tccgggtcga ttatgagtga	240
gtcactccgg tgagatgtcc ggttattttt ctttttgtg aatctggtga tgcgtggat	300
gaaagacaga atacttttt cagtcaacaa tattacctgt gtgatattgt tgtctcttt	360
ttgttaacgca gccagtgcgg ttgagttaa tacagatgtt cttgacgcag cggacaagaa	420
aaatattgac ttccccgtt ttccagaagc cggctatgtt ctgccgggg caatatctc	480
tggatgtgg aattgttaac gggccaaag ta	512

<210> 36

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<211> 827
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (16)..(16)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (361)..(361)
<223> n equals a, t, g, or c

<400> 36
ttgccggtgc ggtaatgtt ggcagtggtg tctttgggtg taaatgtgc tccaaactatt      60
ccacaggggc agggtaaaagt aacttttaac ggaactgttg ttgatgctcc atgcagcatt      120
tctcagaaat cagctgatca gtctattgtat tttggacagc tttcaaaaag cttcctttag      180
gcaggaggtg tatccaaacc aatggactta gatattgaat tggtaattt tgatattact      240
gcctttaaag gtggtaatgg cgccaaaaaa gggactgtta agctggcttt tactggcccc      300
atagttaatg gacattctga tgagctagat acaaattttt gtacggcac agctatcgta      360
nttcaggggg caggtaaaaa cggtgtttc gatggctccg aagtgtatgc aataccctga      420
aagatggtga aaacgtgctg cattatactg ctgttgtttaa gaagtcgtca gccgttggtg      480
ccgctgttac tgaagggtgcc ttctcagcag ttgcgaattt caacctgact tatcagtaat      540
actgataatc cggtcggtaa acagcggaaa tattccgttg tttatttctc agggtattta      600
tcatgagact gcgattctct gttccacttt tctttttgg ctgtgtgtt gttcatggtg      660
tttttgcggc tccgtttcct ccggccggca tgtcccttcc tgaatactgg ggagaagagc      720
acgtatggtg ggacggcagg gctgctttc atggtgaggt tgtcagacct gcctgtactc      780
tggcgatgga agacgcctgg cagattattt atatggggga atacccc      827

<210> 37
<211> 400
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (238)..(238)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (364)..(364)

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<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (384)..(384)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (398)..(398)
<223> n equals a, t, g, or c

<400> 37
ccagggccc aaaatccgtg tatccacctt taaagaaggc aaagtttcc tcaatattgg 60
ggataaattc ctgctcgacg ccaacctggg taaaggtgaa ggcgacaaag aaaaagtcgg 120
tatcgactac aaaggcctgc ctgctgacgt cgtgcctggg gacatcctgc tgctggacga 180
tggtcgcgtc cagttaaaag tactggaagt tcagggcatg aaagtgttca ccgaagtnac 240
cgtcggtggt cccctctcca acaataaagg tatcaacaaa cttggcggcg gtttgtcggc 300
tgaagcgctg accgaaaaag acaaagcaga cattaagact gcggcggtga ttggcgtaga 360
ttanctggct gtctccttcc cacnctgtgg cgaagatntg 400

<210> 38
<211> 578
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (106)..(106)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (501)..(501)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (549)..(549)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (556)..(556)
<223> n equals a, t, g, or c

<400> 38
 ccgattttt gcgaaacgtt ccgcctggca tcaggatagt ttgttcgtta tccagttcg 60
 atagcgcatt gacgatatgc aggctgttg tcatcaccgt gatgtnatta aagcgcgaga 120
 gcaggggaac catctgcaaa acggtactgc cagcatcaag aatgatcgaa tcgccatcat 180
 ggataaaaact aacggcagct tctgcaatca gctcttctt gtgggtgttg atgagtgtt 240
 tatgatcgat aggcggatcg gattcctctt tattcaacac cactccgcca taagtacgaa 300
 tgacggttcc ggcatgttcc agaatgacca gatcttgcg aatggktgtg cctgtggtgt 360
 caaatattgc gccattcttc aaccgagcat ttaccctgct ttgcagatac tccagaatgg 420
 cgccctgacg ctgacgagtt tcatggcgt gatacctgat ttagttcaa atgataactc 480
 gcaaggcagta acatcacacg naatatccac gttcagttaa gcgccatgat agagcatccg 540
 tgatagggnc aggggnagtc acacggcgtt atcaccgc 578

<210> 39
 <211> 399
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (380)..(380)
 <223> n equals a, t, g, or c

<400> 39
 tgttaggtca gggcccacag tcaagcttag gtttactga atataacctca aatgttaaca 60
 gtgcasatgc agcaagcaga cgacacttgc tgtagttat aaaagtgcrc gtaaaatata 120
 tcaccaataa taatgtttca tatgttaatc attggcaat tcctgatgaa gccccggttg 180
 aagtactggc tgggttgac aggmgttta atttcctga gccatcaacg cctcctgata 240
 tatcaaccat acgtaaattt ttatctctac gatattttaa agaaagtatc gaaagcacct 300
 ccaaatctaa ctttcagaaa ttaagtcgcg gtaaatattt gatgtgctta aaggacgggg 360
 aagatttcat cgacacgtcn gcgtgcaatc tatccgtat 399

<210> 40
 <211> 327
 <212> DNA
 <213> Escherichia coli

<400> 40
 cagcctccgt taccggacag caaggaggct gaatggagtt tacaggattt gcttttttat 60
 aatgtctggc catgcagtma aaccggacag gtttattat catgtgaggt attctgacat 120
 aaaaatgctgg atttttattt tgtgacgaat gctgaaaaat tgcatctgca ctctgatgta 180

gcttttatct gttcagtga agcatgccca caaactgagt tattaagttg tggaagaaca	240
gttttgcataat ctccttcaa aaaccagtat gtgcgcattgc ctcgcctaa	300
tggagagcgc tgaaccatac cttcttt	327
<210> 41	
<211> 314	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (72)..(72)	
<223> n equals a, t, g, or c	
<400> 41	
ggagatgggc atggaactca cttcataata atgcctaccc aagaatatt aatagatgac	60
atttccacga gngatagcaa taaaacatca gagcagtctt ctcgcttaga aaaagcttt	120
ttaggtttta caaacacaat gtacagtat tcaaaccctc ctattatagc tcgttttaga	180
gactatctgg aagatggtga gtgcattgac agaatttagcg aatcaatttt ttttacaccg	240
caagaattca atcttgaga tcaccacatt gaaggatggt tcaatgaatt tggtaattc	300
agtggaaactg ttcc	314
<210> 42	
<211> 590	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (44)..(44)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (58)..(58)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (142)..(142)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (145)..(145)	
<223> n equals a, t, g, or c	

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<220>
<221> misc_feature
<222> (491)..(492)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (584)..(584)
<223> n equals a, t, g, or c

<400> 42
tcccaagatc ttttggcg caaatccaca aaacccgtcg ttantgtcgc gcagccantt      60
gcaggccgaa tttgcaccgt ttttagaaagc ggcgttttgc agagcagcac gcagtgagaa     120
gccaccgcgc cacgacctac gngcncgcgc agctggtgta attgcgccag acccagacgc     180
tccgggtttt cgataatcat cagactggcg tttaggcacat caacgcccac ttcaataacg     240
gttgtggcaa ccagcaggtg tagctcacct tgtttaaacg acgccatcac cgccgtttc     300
tcggcaggtt tcattccgccc gtgtaccagg ccaacgttca actctggtag cgccagttc     360
aactcttccc agtagttcc gmccgcgtcg ctccagcaa ttccgactct tcaatcaacg     420
tacaaaccca gtaggcctga cgaccttcag ttatgcagggc gtggcacc gggtgcaatg     480
gatgtcggtt nngcgggtat caggaatagc gaccgttagtc actgggcgtg cggcctgggc     540
ggcactccat ctatcaccga gggtatcgag atcgggcata cgcntgcatt                  590

<210> 43
<211> 400
<212> DNA
<213> Escherichia coli

<400> 43
gacgaaaggg cctcgtgata cgccatttt tataggtaa tgtcatgata ataatggttt      60
cttagacgtc aggtggact tttcggggaa atgtgcgcgg aaccctatt tgtttatttt     120
tctaaataca ttcaaatatg tatccgctca tgagacaata accctggata aatgcttcaa     180
taatattgaa aaaggaagag tatgagtatt caacattcc gtgtccct tattccctt     240
tttgcggcat tttgccttgc ctgttttgc tcacccagaa acgctggta aagtaaaaaga     300
tgctgaagat cagttgggtg cacgagtgaa ttacatcgaa ctggatctg caacagcgg     360
aagatccttgc agagttttc gccccgaagg aacgttttc                                400

<210> 44
<211> 400
<212> DNA

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<213> Escherichia coli

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<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a, t, g, or c

<400> 44
atccggaaag atgcttctan ttttttaag cacgtataaa ctgttaattc aggttcaatg      60
ctacgaaatg cactagttat aacctgtatt gaaggaaaga tcttctgata ctcttccag      120
agatcttcaa gtctggccat ggaaattgac ttggctgcat attctaggtc agtgttatg      180
atagtttctc tattctctct gaatgcggaa aaaaaagctt cattcaacaa tgatagtaaa      240
tccctggcc ggttaaagggt aaattgcaaa catcgcttaa aaccattcct ccctttaaga      300
tcatccgctg tgcatctatc ccaaactcgt tgatcttct caatatctag cttaaatgct      360
actttcattc ttttagctga cagcattagg agttgtgcc      400

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<210> 45
<211> 585
<212> DNA
<213> Escherichia coli

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<220>
<221> misc_feature
<222> (25)..(25)
<223> n equals a, t, g, or c

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<220>
<221> misc_feature
<222> (178)..(178)
<223> n equals a, t, g, or c

<400> 45
taatgttcaa gacagagata taatntacag catcatccca caaggcagat ataacaatac      60
ttgactggaa tatgcaaagc gatagtggc aatttgctat tgaaataata aaatcgataa      120
tcgtttcaga tataaattct ggaggacgtt tacgtttct ttctatttt actggtnac      180
atgttactgc tggataact aagttgaaca atgagttaaa gaaaacatac cgtacgtaa      240
taaaaaatga tgatagtatt tttattgaag ataactatgc actcgaacaa tggtgtatag      300
ttgttattag taaagacgtt tatgaaaaag atcttccaa tgtgttaata aaaaaattca      360
ctaaccctac agctgggttg ctatccaacg ccgcactctc ttgcatttct gaaataagag      420
awaaaaaccca tggatatta acaaaatata ataataaatt agacactgca tatgtttccc      480
acatcttaaa ttataaaaaa tccaaggrgt caagggcata tgcttatgaa aatgctcatg      540

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attatgcagt agatttaatt tctgaagaaa taagatcaat attgc 585

<210> 46
<211> 390
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (2)..(2)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (195)..(195)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (198)..(198)
<223> n equals a, t, g, or c

<400> 46
antcatccaa ctggccgatc agaaaaaaag cgccggcctac gatttcaccc acgaactgtt 60
aaccacgctg gaagttjacg atccggcgat ggttagcaaag cagatggaac tggtgctgga 120
aggctgttta agccgaatgc tggtaatcg tagccaggcg gatgtcgaca ccgcacatcg 180
gctggcggaa gatantcntt gcgttcgccc gctgccgtca gggtggtgca ctgacacctgac 240
agaaaacacag aaaagaagcg atttgccgca atcttaagca gttgaatcgc ttttactgaa 300
attaggttga cgagatgtgc agattacggt ttaatgcgcc ccgttgcccc gatagctcag 360
tcgttagagca ggggattgaa aatccgttgt 390

<210> 47
<211> 473
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (437)..(437)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (465)..(465)
<223> n equals a, t, g, or c

<220>

<221> misc_feature

<222> (468)..(468)

<223> n equals a, t, g, or c

<400> 47

ggatgccagt gtcagcgact ggttaaagtg gtcgatatcg atgagcaaat ttacgcgcgc 60

ctgcgcaata acagtcggga aaaatttagtc ggtgtaagaa agacccgcg tattcctgcc 120

gttccgctca cggaacttaa ccgcgagcag aagtggcaga tgatgttgc aaagagtatg 180

cgtcgtaat tttatctcg tгataccggg cgtcctgctt gccagatgcg atgtttagc 240

atcttatcca gcaaccaggc cgcatccggc aagatcaccg tttaggcgtc acatccgtcg 300

tccccctggca aacggggcg atttcctcc atttgccctca gtggctggcg tttcatgtaa 360

cgatacatga cagcgcccga caagatcctg atactcttg ggtattcaac cgtttccagt 420

gtaattcgtc gttcacnaac attggcgtta caggcggggc tggcngtnac cca 473

<210> 48

<211> 482

<212> DNA

<213> Escherichia coli

<220>

<221> misc_feature

<222> (48)..(48)

<223> n equals a, t, g, or c

<220>

<221> misc_feature

<222> (87)..(87)

<223> n equals a, t, g, or c

<400> 48

gaagtgacgg atggctgtgg tttctccatc ggtcaccagc agcagtngc atcatggatt 60

gcctataaag tcgcgcgtt cctcggnaaa aaagaggaga gcgttgaaga cctcaaattg 120

ccgggctggc tgaacatttt ccacgacaac atcgtctcca cgcgattgtg atgaccatct 180

tctttggtgc cattctgctc tcttcgttat cgacaccgtg cagcgatggc aggcaaagtg 240

cactggacgg tgtacatcct gcaaactggc tctccttgc ggtggcgatc ttcatcatca 300

cgcagggtgt ggcgtatgtt gtggcgaaac tctctgaagc atttaacggc atttcccagc 360

gcctgatccc aggtgcgggtt ctggcgattg actgtgcagc tatctatagt tcgcgcccga 420

cgccgtggtc tggggcttta tgtggggcac catcggtcag ctgattgcgg ttggcattcct 480

ag 482

<210> 49
 <211> 185
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (168)..(168)
 <223> n equals a, t, g, or c

<400> 49
 gacgacctgc aggcatgcaa gcttggact gcccgtcggt ttacaacgtc gtgactggga 60
 aaaccctggc gttacccaac ttaatcgsct tgcaagcacat cccccttcg ccagctggcg 120
 taatagcgaa gagggcccgca ccgatcgccc ttcccaacag ttgcgcancg gaatggcgaa 180
 tggcg 185

<210> 50
 <211> 491
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (472)..(472)
 <223> n equals a, t, g, or c

<400> 50
 taacgcttca atacgcgcga ccagctggcg gcgcatac ggcgtatggc 60
 gagcaaaaatc ccttgtttaa aggtattttg ccagctgccg tcgtcatatt ggcgagctt 120
 ctgacgcgac tgccaggca ttaaacgatc agcacaatcc atgcggcgca gccagtaaag 180
 cggattggtt tcggttgatt taccttgcag cgccccatgt tcgctacatt cagtagaaag 240
 atagtcagcc agttgataaa ccggaatttt ttcttctgct ggcgtatcaa tggctggctt 300
 attgtgattc tgacgcAAC ccagcaatgc cagacatggc gaccctgcca gccacagccg 360
 tcggggcaat aatcggtgaa aaatgtgtcg catattcacc agacttaaag cctatcccag 420
 tggcgtaat tggcagac agtctggaca tggacagcgc ggagaaaccg gnagcgtaca 480
 tatcgtaatg 491

<210> 51
 <211> 106
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (105)..(105)

<223> n equals a, t, g, or c

<400> 51		
acttgaacgg caattattat ttatccatgc aacttcaagt tgcagtatcg gaacattaac	60	
ttttctgggg tgaatatcac tctgatatcg tttttgtat gcgtnt	106	

<210> 52		
<211> 481		
<212> DNA		
<213> Escherichia coli		

<220>		
<221> misc_feature		
<222> (439)..(439)		
<223> n equals a, t, g, or c		

<400> 52		
tttatgtgcg gtattgatgg ctgaaggctg taatatcgga ctggaaccgc tgataaagca	60	
caatatacca gcactgaccc gccatcggtc cagttgggtg aaacagaatt acttcgtgc	120	
agaaaacgctg gtcagcgcca atgcccgcct gggtgatttt cagtcacac tggagcttgc	180	
tggtcgttgg ggaggtggag aagtggcatc agtgcacggc atgcgtttg tcacaccagt	240	
gaagaccatc aactcaggat ctaacagaaa atattttgtt tctggacga ggcacacact	300	
ggtataactt cgtatctgga tcagtactct gggttccatg gcattgtggt acccggtaca	360	
ttacgggrct cgattttgta ctggaaggac ttcttgagca gcagacaggg ctgaatccag	420	
ttgaaatcat gacagacant gcgggttagca gcgatattat ttccggtctg ttctggctac	480	
t	481	

<210> 53		
<211> 558		
<212> DNA		
<213> Escherichia coli		

<220>		
<221> misc_feature		
<222> (4)..(4)		
<223> n equals a, t, g, or c		

<220>		
<221> misc_feature		
<222> (36)..(36)		
<223> n equals a, t, g, or c		

<220>		
<221> misc_feature		
<222> (69)..(69)		

<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (456)..(456)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (462)..(462)
<223> n equals a, t, g, or c

<400> 53	
tggncgtaa ttcccaacca tttgccgagg tccagnttt tcaccatgtt actcgggata	60
gccaacaaacng ataccgatgt tgccgcgcgc ccgggtgcgag gatcgccgtg ttgataccga	120
tcaagttcgcc gttcaggtta accagcgcac caccggagtt accacggttg atcgctgcat	180
cggctctggat gaagtttcg tagtttcgg cattcaggcc gtacgccccca ggcgcagagac	240
aatcccgaa gttaccgtct cgcccagacc aaacgggtta ccaatcgcta cggtgtaatc	300
acccacgcgc agtgcacatcag aatccgcacat cttaattgcg gtcaggttt tcgggttctg	360
gatttggatc agcgcgatat cagagcgcgg atctttgcac accatcttcg cgtcgaactt	420
acggccatcg ctcagttgaa cttaatgcac cgtcgngtta tnaacaacgt gtttgttgg	480
gacgacatag ctttatcgg catcaatgtat gacgcccggaa cccagcgcac tgaattctgt	540
tgctggccgc caccatta	558

<210> 54
<211> 263
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (37)..(37)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (180)..(180)
<223> n equals a, t, g, or c

<400> 54	
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tgaccgtatt cgccgcattc cggaagatcg caaaaagaaa aaacggcaaa cgtcaaccgn	180

cattctggac gcttattgcg ctgattgtt ccgctgcggg cgtggcgtt tcgcacggcg 240
 cgaacgacgg accaaaaggg atc 263

<210> 55
<211> 683
<212> DNA
<213> Escherichia coli

<220>
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<222> (517)..(517)
<223> n equals a, t, g, or c

<220>
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<222> (600)..(600)
<223> n equals a, t, g, or c

<400> 55
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caggatcgca tttgcctgtt tacggtcagc gatgtatggtc atctcggtgc gcaggaccct 180
gcggaaagtga ccaccgttga aggggcccggc ccgcgtcata tggtattcca tccaaacgaa 240
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cgtaccgcca gcctgattac cgtttcagc gtttcggaag atggcagcgt gttgagtaaa 480
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caggggctac tgcatgaaaa aggccgctat gcgggtcgggc agggaccaat gtgggtggtg 660
gttaacgcac actaaccgct gat 683

<210> 56
<211> 282
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (231)..(231)
<223> n equals a, t, g, or c

<400> 56
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 gtccggtttc tggcacactg atgacaacag ttcatcatcc accacccac agggcagcag 180
 catcagcgcc ggcgataacc tgggcgatgg ctgcaggcag agatkctggg ntgtcacagc 240
 atcctctgtt tctgccggc acagccccct gcattctgca gt 282

<210> 57
 <211> 697
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (36)..(36)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (696)..(696)
 <223> n equals a, t, g, or c

<400> 57
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 cagccagccg ccgtccagtg cagtcactgc acggactgtc cccacatatg gcagggagaa 360
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 tccgacacca cccagaaaact tgtgtgtgt attcanc 697

<210> 58
 <211> 4835
 <212> DNA
 <213> Escherichia coli

<400>	58					
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<210> 59  
<211> 1746  
<212> DNA  
<213> Escherichia col
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<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a, t, g, or c
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<220>
<221> misc_feature
<222> (35)..(35)
<223> n equals a, t, g, or c
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<220>
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<222> (877)..(877)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (1746)..(1746)
<223> n equals a, t, g, or c

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<210> 60
<211> 723
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (473)..(473)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (636)..(636)
<223> n equals a, t, g, or c

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<210> 61
<211> 2556
<212> DNA
<213> Escherichia coli

<400> 61
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<211> 790
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (19)..(19)
<223> n equals a, t, g, or c

<220>
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<212> DNA
<213> Escherichia coli

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 <213> Escherichia coli

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<210> 66
<211> 1342
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (1238)..(1238)
<223> n equals a, t, g, or c

<400> 66	
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<210> 67
 <211> 1580
 <212> DNA
 <213> Escherichia coli

<220>
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 <222> (14)..(14)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (18)..(18)
 <223> n equals a, t, g, or c

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TOPSEARCH

100

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<210> 68
<211> 3241
<212> DNA
<213> Escherichia coli

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<210> 69
 <211> 398
 <212> DNA
 <213> Escherichia coli

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<210> 70
<211> 17710
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<220>
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<221> misc_feature
<222> (17685)..(17685)
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tgtttataac gctgcatttc acgcaatgtg tcagttgtcc ccacaacagt tccttaacc	2100
atccgcaacg gccagctgtt tactgagcat aatacgaaca gcagcagtgc cagccagtta	2160

cggtgaccgc ggtggtgtgt tcgccagaaa atcaccatga ataccagaat cgccggactg 2220
 accagaaaaat gataaacagg aatcatcccgtaaactccg ctgcctcatc agttgtggtc 2280
 tgcagcaacg caacaataaa actgttggttg attttaccgt acgtcatacc ggcaggcgca 2340
 tacagtgcac aacagaacag aaataacagc gctgtaatgg atgtgagggt atttctgtgt 2400
 gcaagaagca gaagaaaagaa cagcagcaac acattcccg tggtattctt ctcagtgtat 2460
 ccgcatgcaa ttgtggttat gacagaaaca acaaaaaaaga ataaaaaacaataatcctg 2520
 agagtgttgc ccggacaaaa cagtttctg atattcatcg gagtatatcg acaacattat 2580
 tatgaagaga acaggataat aaaaatcaga agttatctgt gaaacagata acagacancc 2640
 ctgcagtata atattactgc agggtgttcc ttttaatta cagaaatacg taattatctt 2700
 aattgcagaa atatgcgcaa ttatcggtca gaagcagtgt cgtcagaagt tataagtcac 2760
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cggaaataaa	aagattatca	gatatggga	tgacaccaca	gcaccgctga	ggccagtatg	4380
gataaaccat	gtaccttatt	aaccaaaa				4407

<210> 76
<211> 824
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (687)..(687)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (807)..(807)
<223> n equals a, t, g, or c

<400> 76						
ttttttgcaa	gagaatttcc	ctgaacctga	agtcatcat	cgcacatctcc	gccgttcagg	60
taattattac	ctgctcccc	aattaactta	tcgttgccat	caccgcata	gagctggtca	120
tctccgttcc	caccactcag	tgtgtcatta	cctttatcac	catataagcg	gtcattcccg	180
tcatttcctt	ctatatggtc	atcaccatcc	gcccacatgga	agatatcagc	aaatttactg	240
ccaaaaaaact	tgtcggcacg	cgtggtccc	ataagttctt	ccacggaata	taagttatca	300
gtctctgtta	aatttttacc	attgatatga	gtgaattcat	aactccgata	ttgcgtttt	360
tcagttcttt	ttccaactga	aacccctgc	tccttcacaa	cttcctgtaa	aacctaaca	420
tcaccaccaa	gtacacgtgt	taccgtgtaa	ttacccgctt	cgggtgtttt	tgtgccatca	480
atggtcagat	aaccggtgtc	tgttttatca	taataaacaa	catcatgtcc	tttacctgcg	540
tagatattgg	ctgagccggc	agataaaaag	accttatcat	ccccgtctcc	caggtgtgac	600
tcaatacgaa	tttccccata	ctggtttatta	ccgactgatg	catgctgaat	caggtagag	660
taatcatata	cagacccctt	gtcctgnaac	ccccttcacc	gtccatttat	caacaccctt	720
gactaataac	tcggtaatat	attcatattt	tccggactgc	ctccttcac	gaatttcctc	780

accgggagtt taacaatggg cgtaacnaat ttgcaataac gtgg 824

<210> 77
<211> 550
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (2)..(2)
<223> n equals a, t, g, or c

<400> 77		
gnngccgcag tactggatca tcaccgaagt ttgcgcggaa aaagcgtag agaaaagatct	60	
aatgcttcat gatggtgatg gactttcct gatggtgaaa tccagcggaa aatgctctgg	120	
cgttccgtt atcaacattc gacaacaaag cagcggacaa tgatggact cggtgtctt	180	
tccacactt cacttgctga tacccgaggg ctaagagtgg attatatttc cttattagcc	240	
aacagaatcg acccgcaaat tcaagctaaa gccgtagacg aagagcaata tttgaaaagg	300	
tgggcaccta cgttaccaat actggcttaa tggctacata cggcggtcag ggtcagttt	360	
cgcttacaaa atataaaaca atttgataca aaatattcct cttattctaa ataaaaagtat	420	
cttgaaaacc ttccaactgg aaggttagatt gaatttatgc taaacataaa gaggaattgc	480	
ttatgaatta cgttatccgc actaccaccc tggtcttttag tctcatgctg ggcaggttac	540	
gcaactgctg	550	

<210> 78
<211> 382
<212> DNA
<213> Escherichia coli

<400> 78		
cactaaaggc cctggatgtt tttcgctcat tagtagacat ctcgctgata acggcgctct	60	
acgcgcactc actaaaaat tcatccgcgg ctgcgggtgc catgccacca aattcggcaa	120	
tcacttccag aagtgcctgc tcaacgtctt tcgcctatgcg attagcgtcg ccgcagacat	180	
aaatgtgggc accatcattt atccagcgcc acagctccgc gcccgttgc cgcaattttgt	240	
cttgtacgta aactttttct ttttgcgtgc ggcaccaggc aagatcgata cgtgtcagca	300	
cgccatcttt gacgtagcgc tgccamtcga mctggtacag gaagtcttcc gtaaaagtgcg	360	
gattacaaa gaacagccag tt	382	

<210> 79
<211> 3576

<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (1528)..(1528)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (2618)..(2618)
<223> n equals a, t, g, or c

<400>	79					
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tattattgac	cgaaaggaga	ctgccaggca	tatTTTTca	gccCTTCCA	ttcaaACgtg	120
aattcaatca	gctcatcagg	aacatcgcaa	acaatATGAA	gacggatttc	ttctctGCCG	180
tgactcttgt	cactaATTGc	gtaacagtca	tgctctggat	tatTTAATTc	tttcAGCGAA	240
aataaaAGAT	tatCAGATAT	gggatgacac	acAGCACCGC	tgAGCAAGTA	TGTATAACCA	300
tgtacttata	acaaaAGGAG	acgtaAGAAG	ggGAACGGGT	atcAGAGGGC	caatCAAAGC	360
aggTataatg	aacGCCAGTA	taattgtccg	caACCCAGAA	atataTTATT	gaACTGGTTA	420
tctcctgcga	atgcataatac	tgcaacggcc	gttAAAATAG	cattatATCC	ataaAGCCCC	480
gcagagattt	tatcaggaga	aagctcagga	atacagaATG	ataccaccac	actcAGAAAC	540
gaagcGacAA	ccgtaatcat	cagtagttc	cggctccctg	caAGTAGTCC	cAGCATAACA	600
agaataCCGC	cgacAGCAtc	aggAAACATA	aaaATCTCCA	taaAGCTACC	AGACAATGCC	660
accggatagt	ttttcagcaa	aacagaACCT	gcactTCGCC	cgaAGGTACT	gACATATCAT	720
gaggcattat	tccGGAATGT	aataACCACG	tagcgataat	aaAGGGGGCG	gtcaatacgg	780
gtAAccCTCT	gagcactgac	gacaACAGGG	gagtaAACAA	aacaataCCA	agAGTTCCGA	840
cgataAGTAC	AGCAATTCCG	gagactgaca	cAGGGACAAG	catGCCACAG	GCTATGCCAT	900
acagaACAGC	atttatATCCC	catatacTT	cattaATCTC	ctcatcAGGA	taccGCAAAC	960
accaggcAAA	gaacGGAGAA	agtGCTGcac	tgatGGCTGA	gaaatacAGT	atTTcGGGt	1020
gccccatatt	aaaAGAGGCT	attccAGTCG	ccaaaaaaaa	gaacaAGCCA	gaaacaACAT	1080
tgttCTGTAA	taatacCTGT	gaataCCCT	tactaaAGGC	ggttatCACC	TGTTTACTC	1140
tcatgtaaaa	tgtcacacac	acctcataca	taaaccATTc	tccgcttCTG	cGGGACAGTA	1200
ccgcccCTGA	ctccCACCTCA	cagcggattG	tgtatTTTA	aacaatcaca	gtcttCTCAT	1260
atactttcca	ttctGAAGCT	tatctttcC	tccgtgataa	gcttCCGTG	cGGGATGTGT	1320

tatacgcctt	gtaagacagt	tataaaggac	atcaatgcc	tagttatga	ytaccgaatt	1380
ccgggtggata	gtcagtactg	gtttgcac	aaacagtgc	gtcacacatg	acaggagaag	1440
atatgagccg	gataccgctg	ctctgagact	taacgctcat	gtaaactt	tgttacagat	1500
tcttccaggg	actaagaaga	taactgantt	acgttcgcat	tccagtstt	atttctgcag	1560
tgacagccat	acccgagctt	aatggaatgt	gcttattccc	ggttgacaaa	tcattctctt	1620
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gtaattcatt	tgctgcctca	acatatttat	tctcctgctc	aagtacagca	tgtttgcaa	2160
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aagttaaacg	cagtacttcc	tcttcagata	cattctgaaa	ataaggctca	tcaggaagtt	2400
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aacaattttc	cctttttcca	tgacaataat	gcggctcgca	tttttactg	tagacagacg	3060
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ttcaggaata taaaaacgtt gaattaattt agttaatgtg cttttcctg aaccagaacg	3540
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<210> 80
<211> 3541
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (1758)..(1758)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (2529)..(2529)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (3392)..(3392)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (3425)..(3425)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (3452)..(3452)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (3471)..(3471)
<223> n equals a, t, g, or c

<400> 80
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tccctggctt ctcacctgctg ctgacatcaa tttgtgtcac ccgcagcgca tattttcat	180
ccagtgcctt taaccagttc agcaggtcat taaacaccac agttctatc cagacctgga	240
tattctcccc gcgcctggca atccgttga tgaccaccga gtgcgcggaa gctgtcactg	300
atgaccgcg atacctgtgc tggcgttgct gtgcggatt ttgcgcgc aataatatcc	360
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tcgaagctgg caaagttcgc agcccgtagc tggaggtgaa gcgtctggcg ttttgatca	780
aaggtgaaac acgcatttcg atgtcggtaa gtgacgctga tttcagggtta ctggcgatcg	840
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tcgtcacctg agagcgtaaa ttcacaatcc gcttctgctc cggaaatagc gttagaact	960
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atttcaacg gggcgaaatg cagttcatcg atatcctggt tcagcttttc ttccagcaag	1560
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gctgtgcaag aaactgatcg acatcttccc agcccttcgc atgacgttgt tgtaataacg	2040
ctcgccctg aacagggtt aaccacgggt caaacagcgc ctcaagaatc acactttcg	2100
tgacgtctaa ggtattgatg ttgatttgct ggccgggtcat cggcagcgc cagaccagcg	2160
gtttcagttt ttgataaaagc ccggcgtcca ttccctgcac cacgcgcac tcgctgat	2220
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cacgccgcca cgtacaaaac gcatcccttc actctcagac gccagcacgc cagcgcccgc	3120
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gaggcaaaaa tggctattgc caccacatt tccagtaacg tgaaaccagc gcgagtcctt	3360
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agtcntcatg aagactgact tcaatatcca cngcatggag cagcgcatta ncgttattca	3480
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<210> 81
 <211> 1234
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (1156)..(1156)
 <223> n equals a, t, g, or c

<400> 81						
gtactggaca	tctttgatga	acaagctcct	cagtgtaaat	tgtacgtctc	tgatcgtaat	60
cttcctgagg	gcgttgaaca	tctatccgct	gaatttatac	cctatactcc	tgagtcggca	120
gattttctga	ttcaacgttt	tttctctgaa	actatccata	ttgaaagtgc	aattgttgtt	180
acagcactta	aaattgccaa	tcagattgct	ctatctcaa	atgagaccaa	gaatgtgtat	240
ctgcttggat	ttgattttac	gataaagggg	gggttcacta	gcaagatccc	ctgcgcagcc	300
ttgcatgccg	aaccagaata	tcaagagcga	attatcagta	gtcaagaaca	gctattgcag	360
atgctccttgc	cagaaaaaac	acgcctgaat	atcaaatatca	atcatgttgg	taataagcct	420
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 <211> 551
 <212> DNA
 <213> Escherichia coli

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<211> 595
<212> DNA
<213> Escherichia coli

<220>
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<222> (342)..(342)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (590)..(590)
<223> n equals a, t, g, or c

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caccaatacc gagaatcact ccgccatgtt gtaaaagtat cattactgtn atagg 595

<210> 88
<211> 399
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (76)..(76)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (115)..(115)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (379)..(379)
<223> n equals a, t, g, or c

<400> 88
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<210> 89
<211> 1013
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (943)..(943)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (974)..(974)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (1013)..(1013)
<223> n equals a, t, g, or c

<400> 89
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<210> 90
<211> 689
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (643)..(643)
<223> n equals a, t, g, or c

<220>
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<223> n equals a, t, g, or c

<220>
<221> misc_feature
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atcaccatct gtaccgcgtt tcctcggtt atctgcggcg tgactttcag catgatgcgg	780
actttttcc tctctaccgt gttgaaagga ttgctgttat tggagccaaac gtagatcca	840
gttaataccg gaacgtcctg gcccaccatg aagaaggctt cctgggtgtc cagcgtggtg	900
atgctcggcg tggagagcac gttcgagctg gagtcgttt tgaccgcctg taccagcgcc	960
atccagtcgc ctcccamcac gccaaccgac gtaccgctaa agccagaaag aagctgagca	1020
agcgtggaga gatcgccgtt agtatccgga tttatgggg tagcgccgtt ttcactgatc	1080
accgtggagc ctccatcggtt ttttgcgtga gaaatcgtgc gcccagcgta ccaataggga	1140
tctgcgtacc gttagcaaac tgcattaatc cggcatctt cgacgcccac tgcacgcgg	1200
aattgataat tcacccatcgca acttccac gatcaacgccc tcgacatgtc cctgagcacg	1260

gcgaatatcc agttgttcaa t

1281

<210> 92
<211> 421
<212> DNA
<213> Escherichia coli

<400> 92
caatattagc gcacggcacc aaagggtatg aatgagcagg ctgraatatt atttcccg 60
ggtcagaaa tccttgttct tgggtgtaca gaaattccgg ttattctggc gcaacgttaa 120
agagcagcct tcccgctata ttgactcacg gcgtcactcg ttcgtgccgg aataaaatgg 180
tacgaaaaatc gtgtcgtaa acattatctt ttaacccaat aatcatatccat atcgagcca 240
gaaagttatt cgcttttaac tgaattatat ttataacgga gaacattatg gtttggctgg 300
aaattatcggtt agtacttggt gcaatakttt ttggatttcg ccagggggga atcggtattg 360
gtttatgtgg cgggcttggg cttgccattc tgactctggg acttggtctg cctatgggg 420
g 421

<210> 93
<211> 1018
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (781)..(781)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (990)..(990)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (993)..(993)
<223> n equals a, t, g, or c

<400> 93
gttaacaatg gcttaacaaa ttcaataac gtagaagatt tgctgtcaga aaggtcaata 60
tttccttca atgggtcaaa gacttgcttc tggattcat ccgggtttt ctccagacgt 120
tttccttctt cataatagtc aatataactt ttaccactga gtgtttgkc yccatttctg 180
gtgacaccag ctaactcacc tatcagcgta tcccmatgtt gctggtaat gaggactgat 240
ctttcaacag aatactctt attatactga gataatattt taaagttatc ttctaaaaat 300

gcagcatggc	gggcatcata	tcccatttc	aaagtaattt	ttgccgtgtt	ttttctccca	360
ttcagcaata	acatcgcca	ttttactggc	gacatgttca	aacattgcct	gttttgaagc	420
ctcaaggatg	cctgaaatta	tccccgtaac	agcccctacc	agcgcgctta	ccgggtgcacc	480
aaccagagat	gtcggtgcag	cagcaactaat	acctgaagat	actgaagcca	gaacagtgt	540
tatcggtt	aacgatgcat	caatagctcc	tgtttctttg	tggaaagcag	caagtaaact	600
gtcaccatcg	tatccaagtt	ttttgaatcg	ttgtgaatac	tcctctattt	tattggcacf	660
tttaaactta	tcggcaatgg	acaggaatga	gaggggacta	attgccagtg	tcacaacaga	720
agcaattaaa	ccggcagcag	cagcagatgt	agataacccc	tgtgctgcac	gctgtgcgay	780
naatatattg	agaaaataacct	tttccaacat	tacccagtagc	tttcgttgtt	aattcaacac	840
ctgctgcagc	tttagttccg	gtatctgcat	ctgcattgct	cagaatgaaa	cttgctgaaa	900
tcgcagataa	aatacccgat	acagtatcta	accctgcacc	gatattatca	aggttaggta	960
aattctgtaa	cttattacca	acaccgttcn	gnctgttgg	tattggata	atacactt	1018

<210> 94
<211> 400
<212> DNA
<213> Escherichia coli

<400> 94	ggcaatgttc	aaatcgatat	tgtgcagcac	ctgggttggg	ccaaagtgt	tggagacgtt	60
	tttaaattca	atcacaggat	tttcatcctt	cttccagac	gacgcagaat	aaagctcagc	120
	accaggtaa	taatcagata	gaacaccgccc	acggcgctcc	agatctcaag	ggcgcgaaag	180
	ttaccggcaa	taatttcttg	cccctgacgg	gtcagttccg	ccacgcccgt	cacaataaac	240
	agcgaggtgt	cttaatgct	gatgatccac	tggttaccca	gcggcggcag	catacgacgc	300
	gtgccagcgg	taaaatgacg	tagcgaatgg	tttcccmacg	tgaaagacccg	agcgccagtc	360
	ctgcttcacg	aaaacctttg	tggatagaca	gcaccgcacc			400

<210> 95
<211> 1857
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (16)..(16)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (1465)..(1465)

<223> n equals a, t, g, or c

<400>	95					
cgttcccc	tggccngctt	ggttcgcc	tagacgttga	gcggggaaat	cacatcggtt	60
tccacccaag	gacgttcacc	acttccatcg	aaaacatagt	cggtaata	atgtactagc	120
cacgcaccta	atgcttcagc	ttctttggca	ataaccgcca	cactagttgc	attgagtaac	180
tcggcaaatt	cccgcact	ctccgcgg	tcgactgcag	tatggccgc	tgcgttaaca	240
atcacatccg	gcttgacgag	acgtaccgtt	tcagccaccc	ctgcagaatt	gctaaaatca	300
ccgcaatagt	cggtgagtc	aaaatcaacg	gcagtgtatgt	gccccagagg	cgccaatgca	360
cgctgcagct	cccatcctac	ctgaccattt	ttgccaaaca	acagaatatg	catcaggtac	420
gctccctata	gttttgtca	atccaggattt	ggtaggcacc	actcttgacg	ttgttaatcc	480
attgttGatt	atccagatac	cactgcacgg	tcttgcgaat	accagactca	aaagtctcct	540
ctggctgcca	atccaacgca	gchgctcatct	tgcaagcatc	aatcgcatat	cggcgatcgt	600
gtccggggcg	atccgcccaca	taagtaattt	gatcgcgata	agagccagct	ttcggtagcca	660
tctcgtcaag	cagatcacaa	atagtatgt	ctacatccag	gttctgcttc	tcgttgtac	720
cgcctatgtt	ataagtctcc	ccgaccaagc	cagtggtcac	taccttgcgt	agtgcgtcg	780
catgatcttc	cacatacaac	cagtcacgaa	tttggtcacc	tttaccataa	accggcagcg	840
gcttgcacatc	cagcgattt	aggatcacta	gcgggatcag	cttctcgaa	aagtggtaag	900
ggccatagtt	gttggagcag	ttagtgacaa	tggttggcag	gccgtacgta	cggtaccaag	960
cacgcaccag	atgatcgctg	gaagccttgg	aggcagaata	gggactgcta	ggagcgttagg	1020
aggtagtttgc	ggtaaagagc	ggcaatgcct	caccggaggc	tacttcatcc	ggatggggca	1080
gatcgccata	tacttcatcg	gtagaaatat	ggtggaaagcg	aaaggccgc	ttgctcaact	1140
cgcggact	gctccaatag	gchcgagccg	cttccagcaa	tgtataggtg	cctacgatata	1200
tggtttcgat	aaagtccggct	ggccctgtga	tagaacgatc	aacatggctt	tcagcagcc	1260
gatgcacatc	ggcatctggc	tggtgcagag	caaacacccg	atccaactca	gcacgattac	1320
agatatacAAC	ttgttcaaAC	gaataacgct	cacttgacga	tacactggcc	aaagattcca	1380
aattgccagc	ataggtgagt	ttatccagat	tgataacgga	gtctccagta	tcactaatga	1440
tatgacgcac	cacggcagag	ccgaaaaaac	cagcaccgccc	agtaacgaga	atcttcata	1500
atttcgctct	tttatTTAC	aattaatagc	tattaaaaat	aaacttgg	actccgatata	1560
attagaaata	tcgggataacc	gaactaaata	tttttatatg	cttttgccaa	gcagactcta	1620
tatccaccct	gtatcactat	gctttctggc	atacaatatac	ccatcattga	cacaatgata	1680

aacatataaa taaaagaaaaat tttaaatcat ataaccaaatt tactttcatt tattatcaat	1740
aagtattttg ataagaatac ctataccaca gggagcccc tgaaacataa tattagcgaa	1800
gaatgataaac tgatagttac catcttagag ataaaaactt atttgtgtgg cgggatg	1857

<210> 96
<211> 1128
<212> DNA
<213> Escherichia coli

<400> 96	
agctcttcg tgtaaaataa aatacagcat atccttatata gcttacaatc attaaatgaa	60
gtcgccaata tttatatgtt ttatcaatat cagcttgact cattgttatt tctttgtcag	120
gagactctga aaatatggac atatataacc tcttttatta tgaaatattt tcaataataa	180
taatccgtta gtaatcctat cataggtaa tgtctcatca tgttaaaatg atcacattt	240
taatcatgtc aaaaagaaca acagaaaaaa tcatataaaa tcaattaaat ataattgcc	300
catattgttgc ttattwaaac attgggttgt aatttaaagc gagaacagtt tgtaacagtg	360
actccttgca gactaagtta gagtctcctt ctaaaattag acggwkttct attgatggat	420
aatagtaagc gcaccgtgaa kgacgtgggg taaaaattag tttacagatt gagtgacatt	480
ccagggcaac aactcttcgca cgccgtggc aggccaggtg ttgattacac tgatcacgtg	540
gcgtacatta ccggactcga ttccgttaag tttgcagcta ccgatcaggc tgtacatcac	600
tgccgcactc tcgcctccac catcagagcc gaagaacatg tagtacgccc gccccagtgc	660
aatacccgga ggcgtttca cacaggattt tgtcgatctc cacccagcca ttgcggcagt	720
attcgttcag agcgtcccat tgcttcagca gataggtgaa cgctttcgct gtatccgagt	780
ggcgcgacag tgctcatctg cccctggagc cactcataca acgactgcat tagcggtacc	840
gttctggctt ttctgaccgc cagtcgtct tctgccggac tgccgcggat ctcagcctcg	900
atagcgtaca gttcaccgat acgctgcagg gcttccgtgg tgatgtcagg tggcgctctt	960
gcatgcacat cgtggatttt tctccggca tgggccatac aagccgcattc ggttacctga	1020
ccgctttcgt aaagagcatt gtaacccgca tatgcacgg cctgcaggat acctctgttag	1080
tccgcccagat gttgctgtgg gtggatgcct ttgcggcgg gagagtag	1128

<210> 97
<211> 439
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (401)..(401)

<223> n equals a, t, g, or c

<400> 97 gtttgcttac gaaccgtgaa atatgacggt cccatataac tgccctgatac ttgttatatca 60
tataacttgtg catgcattgtc atcattaaaa agtactttgt caccgtcttt aagttgaaga 120
cgtgtaaaaat ctttatacgg caagtagacg gaaaacgggc gctttccctg tcgccaatca 180
cacccgacatg actgactttt gcgagaggaa gtgcataatt caccaattca gagcctaattg 240
cattgcgcctg ggtaagctca aatcgaaatg ggtttcgaac ctttccccca acattgatca 300
ttggaccttg ttgctcaact gaaaatcaca tcttgatctt ttaatgccag ctccggaggt 360
ttcccataacc gatatgaaatc ataaagatca atttgckgtg nttactgcta ttttgcgt 420
qaacacccatata acccttgcg 439

<210> 98
<211> 906
<212> DNA
<213> Escherichia coli

<400> 98 tattcgtaat tagttataaaa cagatgatgt aaacaccagt tgactagagt caatcttata 60
ctggcaacat ctatgattaa tttgtgtggt tataatttta aatatcttat atttatggc 120
tattattgtat atctgtcaga gtagtcaataa tagaaggtaa ttgttttaca tactatcaac 180
ttttggataa cgttttaaaa tgcacccgtc acatcgattt ttatttattt cactaatctt 240
ttttataacg gcctgacgcac atgatccaaa acaagttgaa gcctctcgac cattggtaac 300
agcgatttaat tcttcttattt ctcttattcc tgaagatttg caggcaccat taaataacca 360
agatcaaggc acgacattca acaaaaatgg cgtaattttt actattgagg aaaggtatata 420
atcggcttta ggttctcaat gcataaaagtt aagttatgcg atgaataaaaa attattcaaa 480
gcgaagtgtt gtatgtaaag agaataacaa gtggtatcaa gtacctcagt tggacaaac 540
atcagtttagc actttgctta ttgaagaata aagttgaagg tagacggtaa gaaaataatg 600
aaaatttcgc aacttagcac tcttctctt cttatttctg catcagcatt cgccgcaata 660
gagcaaaaatc aatctaattgg ttcacatTTT gattatgatc ttgctgcctc gacaggagag 720
tctcgaaaaa tgcttagcaga catcaCTGGA cagcctaata caacCTCCAC aacaggaagc 780
ttcacacaac agaatcgtaa tgggatgttgc ttccaggag agtcagatgt acgaaaatta 840
ctgccgcaat ctgaaggcagg cttacccctt ccgtatgggtt ctaatttattt tgccggaggc 900
tatgaa 906

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<210>  99
<211>  1395
<212>  DNA
<213>  Escherichia coli

<220>
<221>  misc_feature
<222>  (1121)..(1121)
<223>  n equals a, t, g, or c

<220>
<221>  misc_feature
<222>  (1264)..(1264)
<223>  n equals a, t, g, or c

<400>  99
gcggcctgat atatgccgtt attacaaaaa gaggatcaac cacactgcct tttggaccgt      60
gtttaagtct gggcggtata gcaacacttt atctacaggc attgtttaa tgataaccac      120
gtcattatca aagtgacatt ttaactctta ttaataaacct tagagattat ttaccatgtc      180
gataaaaacaa atgccaggga gggtattaat atcgctattt ttgagcgtta caggattatt      240
aagtggctgt gccagccata atgaaaatgc cagtttactg gcgaaaaaac aggcgcaaaa      300
tatcagccaa aacctgccga ttaaatctgc gggatatacc ttagtgctgg cgcaaagtag      360
tggcacgacg gtaaaaatga ccattatcag cgaatcgggt actcagacca cgcagacacc      420
tgacgcctt ttaaccagct atcaacgaca aatgtgcgct gacccaacgg tgaaattat      480
gatcaccgag ggaattaatt acagcataac gattaatgat acacgtacag gtaaccagta      540
tcagcggaaa ctggatcgta ccacctgtgg aatagtcaaa gcataacgtc gggtagat      600
aaattggcgc gggttgttt tcgtgacgca cgaatttattc tcattcaatg gctgacaaaa      660
attcgtcaca ctcttaacca gagacaatct cttataacag acaaagagca tctgcgcaaa      720
attgcacgacg ggtatgttctg gctgatgctg cttatttattt ctgcaaaaagt ggccgattca      780
ctctggcgct atttctcctt ttctgcggaa tatacggcg tttccccatc ggcaataaaa      840
ccgctccgtg cgratgcaaa agcgatcgat aaaaatgacg tgcaattat cagccagcaa      900
aactggttt gcaaatatca gcccgtcgcc acgcccgtaa aacaacccga acctgcacct      960
gtggccgaaa cgcgtctrrr tgtgggttg cgtggatcg cctttggtgc cagacccggc     1020
gcggttattt aagaagggtgg taaacagcag gtctatttgc agggtaacg cttggctcgc     1080
acaacgcagt gattgaggaa atcaaccgac accatgtgat ntgcgtatc agggaaaaat     1140
agagcgcctg agcctggctg aagaggagcg ttccaccgtt gccgcgacca acaaaaaagc     1200
tgtcagtgac gaagcaaagc aagctgttgc tgaacctgct gtcagtgcgc cagttgagat     1260

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cccnngctgcc	gtgcgtcagg	cactggcgaa	agatccgcag	aaaattttta	actatatcca	1320
gcttacgcct	gtgcgttaagg	aagggattgt	cggttatgca	gtgaaaccgg	gggcagatcg	1380
ttctctgttc	gatgc					1395

<210> 100
<211> 380
<212> DNA
<213> Escherichia coli

<400> 100	cacttgaata	aaactgacac	cgtttacctc	cataatagtg	agcatagccg	ccattgcggc	60
ctgatcgccg	aaccggaaat	cgcaacctgc	gaacgacaac	cgaaccggca	agcgtgcggg		120
aaggacggat	accggactct	ttcgcccatt	cagcaatcac	cggcagcgtg	aaaaaaacaa		180
taaaccagg	accggccata	atggtcatag	accaggtgat	aatcgccgcg	attatgttga		240
tatatttcgg	gttacgcccgc	ataaaattac	cagcgacggt	accagataat	ccattccccct		300
gcggcctgt	aggctgaggc	cgccacaaca	acggtcataa	taatcaggat	cacgtcgact		360
ggcggcgacc	ccataggcag						380

<210> 101
<211> 995
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (22)..(22)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (35)..(35)
<223> n equals a, t, g, or c

<400> 101	ctttacgggt	taatagggga	angccgactg	gatgnaaaaa	tggaatctgg	agcccagaat	60
aaatctgaat	ttaatgtgga	ctggatatgc	tccaaaacc	ccggcaggga	gtcatcttg		120
cgaagatatt	tgcgttatgc	tgtaatataa	taattcaatg	tatttcagga	acagtaat		180
actacagttt	ctactttctt	gtatTTATAA	aattgttccg	catcgctaaa	agcaggtctt		240
tcagaagcca	caagaattct	gtggtcccag	tatTTTtagt	tatcctatTT	ttatATCTAA		300
cttgtaatac	ttacagcatt	ttcattcatc	ctaattggaa	gctgtataaa	tctttgagct		360
tagaaacatc	aaaattatgc	atctcattaa	ttttgtcagt	cacacgacct	ctggtaaaaaa		420

taaaaacccc	agaaatatgc	catttctagg	ggggcgtaa	aatcaatat	attttagtgt	480
tgttacattt	agctcttagc	tcttagctct	tagctcttag	ctcttagctc	ttagcgtttg	540
tagttcatc	gcaatgagta	aaaggacaac	aagaataagt	gataacgtta	agagaagagc	600
atagaaacca	ttccagtggt	atatttctat	tatTTtagac	aatggatagc	cagccgcgga	660
cgcaccaaga	tatgcgata	aactaacaaa	accagtagaa	gcaccagatg	catattttatg	720
ttagtttca	gcagctgcca	ttgcgatcag	aaattgtggc	ccaaagataa	agaagccagt	780
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agaagcaatg	attataccaa	ttgtataaat	aacattcatt	tgagagcgat	tgcccttaaa	900
cagaatatct	gatccccatc	cagctacgat	agcacccaaa	aagcctccaa	cctcaaacat	960
cattactgtt	gcatttgctg	ttagcaagtc	atatt			995

<210> 102
<211> 817
<212> DNA
<213> Escherichia coli

<400> 102						
taaaaagcgac	tccatgtgaa	atttctgttt	gtcgaaaaaa	ccccgttgt	gcggctctgc	60
tcctggcttc	cctgatagtc	agcccgagg	cgccaggggcc	ccagattccc	ccccacagtc	120
ccgttataac	tgaactgatg	agagtctct	ccctgataat	tacggaaac	cgtcccgtg	180
aggttataat	ccagcatcag	tccggaaatg	ccgtcgccc	agcgtgaggg	aggcagccag	240
gtggcatcag	aataactcaag	ccaggcctgc	ggcatattga	tgcgtataatac	gccccgtccg	300
gtatcaggac	gaatatccac	tcccggcaac	ccatgaaaat	ccgcacactg	accatcatgc	360
cagtaaacaa	ctttatccag	agattctgct	gttaacccca	tcagtctgac	catactgtat	420
gtcagacagc	tgcggcaatt	tttttctgc	cttatctcct	gacaacgcag	gttcaacaaa	480
tgamatctgt	aacgatgcgg	gagaaatact	ttgcccgtt	acaatcacat	ccagaagata	540
ttgccccggc	agaacatagc	cggcttctga	aaaacgggtg	aagtcaatat	ttttcttgc	600
cgctgcgtca	agtacatctg	tattaaactc	aacggcactg	gctgcgttac	aaaacagaga	660
caacaatatac	acacaggtaa	tattgttgac	tgcaaaaggt	attctgtctt	tcattccacg	720
catcaccaga	ttcacaaaaaa	agataaataa	ccggacatct	cacccggagtg	actcactcat	780
aatcgaccccg	gaatcccagc	acagcaaaat	aatttcc			817

<210> 103
<211> 709
<212> DNA
<213> Escherichia coli

<400> 103
 ttttgcag agcgttcaact ctctggctgg atgatttcgg ctcggaaat gcaggcttaa 60
 tgtggggact gtcggggatg tttgaacggg taaaaataag tcatgagttt tttcattatg 120
 tcctgaaaaa cgggtgtgca atgccacttc tccgtgtgt ggcagacact gttgcctgtc 180
 acaacagagg cgtgatactc gaagggtttg aaaatgaagc gttgttccgt attgccagag 240
 acatgaatgt ccagggctgt cagggatggc tctacaggcg tgtgggggtt gatgaattat 300
 cccgcgttat tcagcagtat gaataatcct tttcacaga ctggtcagct gtcaacattt 360
 atgtttttt atctgcggga atttatccgt ctgcctgtcg ggactactct gtcatacaga 420
 aatcaggcca gaataaattt ttgtggaaag gtgagattt ccggatgact gatgtgctct 480
 tgtgcacagg tatacaggca gtgtgtttcc agtatatggaa aatgattaa atgaataaca 540
 cagacttatt agaaaaaaatc atcaggcatc aacaaaacaa agatcctgca tatcctttcc 600
 gggAACATCT tttgatgcaa ctctgtatcc gtgtaaacaa aaaaatacag aacagtacat 660
 ctgagttttt tggtgcataat ggtataaattc actcagtata tatggttct 709

<210> 104
 <211> 485
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (477)..(477)
 <223> n equals a, t, g, or c

<400> 104
 tcatcaaggg acggggcata tctggatgcg acagggcaaa ccaaccactg agaatccaa 60
 ctgccaaagc ctgaccagga agtccgacgt taaagaaacc agctcgactg gcaacggcaa 120
 aaccaagacc aatcaagacc agaggaccca tagcacggaa gatttctcca atccccacgca 180
 gactgccaaa ggctgtataag aacaattctt ctagccccca aatagcatca taaccgaaga 240
 tccacatgac aatggctccg agtaaaattc ctaggaatac agaaatcaag ggaaccgaaa 300
 tttgttgtaa ttttttagac atcactcttc tcctttccca agttyccacc agccatcaag 360
 acaccaagtt ctgttttatt ggttgtttct ggtgatacaa taccttgaat cttaccatcg 420
 tggataacgg caatacggtc tgagacgttt aaaatctcat ccaattcaaa gctgacnaca 480
 aggac 485

<210> 105
 <211> 459

<212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (436)..(436)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (449)..(449)
 <223> n equals a, t, g, or c

<400> 105
 agcagaatag gcaacatcac cacgcccaca aacagcgaga agagaatgac gccagccgcc 60
 aggaacacca gctcatagcg cgccggaaag acgttaccat ccggcaagag cagcgggata 120
 gagagcacac cgcccagagt gatcgccccca cgcaccccg cgaaagacgc gatcaggatt 180
 tctcgtgtgg tccacgaacc aaactccatc ggtttttct tcaggaagcg gttgctgaac 240
 ttttcatcg tccacagcca gccgaaacgg accagcatca gcgcgcata tatcagaata 300
 atattggtaa acagcatcca gattcgacg ttagggtcga tttcttgctg gccatcagcg 360
 gacgtttcc agrattaccc ggcagctgca gaccttaaca gcagggaaaca ccatggccgt 420
 tttaaggaca attcnagca tcggccang tgctgtttt 459

<210> 106
 <211> 908
 <212> DNA
 <213> Escherichia coli

<400> 106
 ttaatagcac taatactgtc ctgcttatt ccgctgacat tttcagtcag ctgctgtatg 60
 ggatgggtta cccaaaacca gaccagcata cctgacaaga gaccgcata cactaccaga 120
 aacagcgacc agtacagtgc attccatagt gcctttgtcc aggctgtatc agtaagagca 180
 ttaagttcct ctccctgtaa aataatatac agatatcctt tcggttcatc actctggtaa 240
 agcggtgccg tactgaaaac ttttgctta tttacacttc ggggatcatc accatatacg 300
 ggccagacac tgccggagag aaatttttc aacggtgcaa tattgatata cggcgtttg 360
 agatgacccg gagggcggcc tccacaagca gtgccttc cggtgaaacc atatacagct 420
 ccacactggg attaagcgtc atcagacgct caaacagact cgttaatgtc cggtgttacc 480
 agacaaaaca agcatcgcaa gacgccacaa acggtgct tacttaata agccggttac 540
 aggtgaaaaaa tcacgtcctg atattcaaat gtttttcag gtcataatcc agcaggacac 600
 taccagcacc taacagcagc acatcttta taacaaaact gtcaacttc cccagtttg 660

gtaacaggct gagcgtggtt attcctgtaa caataacgtat aatatctccc agtacaccag 720
 cagcaggcct gaagaaaaccg ataatcaatgc ccagaaatgt gatagttcc actatgccga 780
 ggaaatacgct ccctccatga ataccaaata taatatacag gatattcagc caggtggat 840
 atatcaggggg cttagagagcc ataacttcaa aatcaaaccat tttataagtc caaaaaagca 900
 taaatatt 908

<210> 107
 <211> 1057
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (88)..(88)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (1019)..(1019)
 <223> n equals a, t, g, or c

<400> 107
 cgggctaacc caatatgctt tattaacccg ggataattac cctgttgcat attgttagttg 60
 ggctaatatc agtttagaaa atgaaatnaa atatcttaat gatgttactt cattagtcgc 120
 agaagactgg acttctggtg atcgtaaatg gttcattgac tggattgctc ctttcgggga 180
 taacgggcc ctgtacaaat atatgcggaa aaaattccct gatgaactat tcagagccat 240
 cagggtgtt cccaaaactc atgttggtaa agtacgaaa ttccacggag gtaaaaattga 300
 taaacagttt gccaataaaaa tttttaaaca atatcaccac gagttataa ctgaagttaa 360
 aaacaagtca gatttcaattttt cattaac aggttaagag gtaattttt gccaacaata 420
 accgctgcac aaattttttt cacactgcag tctgcaaagc aatccgctgc aaataatttgc 480
 cactcagcag gacaaaggcac gaaagatgca ttaaaaaaag cagcagagca aacccgcaat 540
 gcggaaaaaca gactcattttt acttatccctt aaagattata aagggcaggg ttcaagcctt 600
 aatgaccttgc tcaggacggc agatgaactg ggaattgaag tccagttatgc tgaaaaaaat 660
 ggcacggcaa ttactaaaca ggttattccgc acagcagaga aactcattgg cctcaccgaa 720
 cggggagtga ctatcttgc accacaattt gacaaatttac tgcaaaaagta tcaaaaagcg 780
 ggttataat taggcggcag tgctggaaat ataggtgata acttagggaa ggcaggcagt 840
 gtactgtcaa cgtttcaaaa ttttctgggt actgcacttt cctcaatgaa aatagacgaa 900

ctgataaaaga aacaaaaatc tggtgccaat gtcagttctt ctgaactggg caaaagcgag	960
tattgagcta atcaaccaac tcgtggaca cagctggcca gccttaata ataatgttna	1020
actcatttc tcaacaactc aataagctgg ggaagtg	1057

<210> 108
<211> 752
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (714)..(714)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (719)..(719)
<223> n equals a, t, g, or c

<400> 108 taccgggccccc cccctcgagg tcgacggtat cgataagctt gatatgaat tcctgcagcc	60
cgggggatcc actagttcta gagcggccgc caccgggtg gagctccagc ttttgttccc	120
tttagtgagg gttaatttcg agcttggcgt aatcatggtc atagctgttt cctgtgtgaa	180
attgttatcc gtcacaatt ccacacaaca tacgagccgg aagcataaag tgtaaagcct	240
ggggtgtccta atgagtgagc taactcacat taattgcgtt gcgctcactg cccgctttcc	300
agtccggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg	360
gtttgcgtat tggcgctct tccgcttcct cgctcactga ctcgctgcgc tcggtcgttc	420
ggctgcggcg agcggtatca gctcaactaa aggccgtaat acggttatcc acagaatcag	480
gggataaacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa	540
aggccgcgtt gctggcgttt ttccataggc tccgccccct gacgagcatc aaaaaaatcg	600
acgctcaagt cagaggtggc gaaacccgac aggactataa agataccagg cgtttcccc	660
tggaaagctcc ctctgtcgct ctccgtttc cgaccctgcc gctttaccgg atanctgtnc	720
ggcttctcc ctccggaaag cgtggcgctt tc	752

<210> 109
<211> 486
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (11)..(11)

<223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (477)..(477)
 <223> n equals a, t, g, or c

<400> 109		
cttggtaat ngacctata tccctccgcc aaaaaaggat ctacatgcga ttttgcgaag	60	
ccagcgttga ttgtaggcga gagaatggtt ctgttgttt ggtacatttc agttgtcatg	120	
gatttcacaa atgttagcatg acctttcacc tgtccaagag actgcaacac catctgtcca	180	
aaacaataaa taggaatcaa acaggctacc aacatcaaca agtatccaa taaggctcg	240	
agtttagtcc ttgacatgac gccctccaa ttgctttct agtccttga caatccgtcg	300	
attacgatac acgcgataca gcaagagaag gatgaccgc atcgctccta gtaataacca	360	
caaccagaat tgcccacgct ctctcaccgc tcgattccgc tctgcaattg gtgccgtata	420	
cggaatccgc ttcccacgta ccaacagacg atgactgtta atcctatacg gtgtacnagt	480	
caacca	486	

<210> 110
 <211> 313
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n equals a, t, g, or c

<400> 110		
ttacgcnttc aaccaggtct tctggtttac caacgccccat caggtaacgc ggtttgtctg	60	
ccggaaatttgcgggcataca tgctccagaa tgcggtgcat atctgctttc ggctcacccca	120	
cagccagacc gccgacagcgtt accatcaaaa accgatatctt accagacctt taacagaaat	180	
atcacgtaaa tcttcgtaaa cgctgccctg gatgatacca aacagcgtcat ttttgtttcc	240	
gagactgtca aaacgctcac ggctacgtcg cccaaacgcag agacatctcc atggagcggtt	300	
ttgcgttaatccca	313	

<210> 111
 <211> 1613
 <212> DNA
 <213> Escherichia coli

<220>

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<221> misc_feature
<222> (27)..(27)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (40)..(40)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (168)..(168)
<223> n equals a, t, g, or c

<400> 111
cgaaaaatccc agtaattcca tcctcanata ttccactcan cctcactgta acaaagttc      60
ttcgaataat aaaaatcatg ctttctgtta tcaacggaaa ggtattttta ttctctgtgt      120
ttgcatttttatt tgtgaaattt agtgaatttg ctttttgttg gctttatntg atgtgtgtca      180
cattttgtgt gttatttttc tgtgaaaaga aagtccgtaa aaatgcattt agacgatctt      240
ttatgctgta aattcaattc accatgatgt ttttatctga gtgcattctt tttgttggtg      300
ttttattcta gtttattttt gttttgtggg ttaaaaagatc gtttaaatca atatttacaa      360
cataaaammc taaatthaac ttattgcgtg aagagtattt ccggggccgga agcatatatc      420
cagggggcccg acagaagggg gaaacatggc gcatcatgaa gtcatcagtc ggtcaggaaa      480
tgcgttttg ctgaatatac gcgagagcgt actgttgcctt ggctctatgt ctgaaatgca      540
ttttttttta ctgataggtta tttcttctat tcacagtgac agggtcattc tggctatgaa      600
ggactatctg gtaggtgggc atcccgtaag gaggtctgctg agaaataccca gatgaataat      660
gggtatttca gtacaacact ggggagactt atacggctga atgctttgc agcaaggctt      720
gcaccttatt atacagatga gtcgtcggca tttgactaaa ttatggcatt ccggagttc      780
tggaaagataa aaaaagaagc ctttatcaga aagcagacag gttatatacg tattctgtcg      840
ataaataacc tgccctgaaa atacgagaat attatttgc tttgatctggt tattaaaggt      900
aatcgggtca ttttaaatttgc ccagatatct ctgggtgtt cagtaatgaa aaagaggttg      960
ttatatttgc ttaagtcgggt tattggcggt gcggtcgtat ggcagtggtg tctttggtg     1020
taaatgctgc tccaactatt ccacaggggc agggtaaagt aacttttaac ggaactgttg     1080
ttgatgctcc atgcagcatt tctcagaaat cagctgatca gtctattgat tttggacagc     1140
tttcaaaaag cttcccttgag gcaggaggtg tatccaaacc aatggactta gatattgaat    1200
tggtaatttgc tgatattact gcctttaaag gtggtaatgg cgccaaaaaa gggactgtta    1260

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agctggcttt tactggcccg atagtaatg gacattctga tgagctagat acaaatggtg 1320
 gtacgggcac agctatcgta gttcaggggg caggtaaaaa cggtgtcttc gatggctccg 1380
 aagtgtatgt aataccctga aagatggtga aaacgtgctg cattatactg ctgttgtaa 1440
 gaagtcgtca gccgttggtg ccgctgttac tgaaggtgcc ttctcagcag ttgcgaattt 1500
 caacctgact tatcagtaat actgataatc cggtcggtaa acagcgaaa tattccgctg 1560
 tttatttctc agggtattta tcatgagact gcgattctct gttccacttt tct 1613

<210> 112
 <211> 930
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (26)..(26)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (126)..(126)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (540)..(540)
 <223> n equals a, t, g, or c

<400> 112
 nttagtccatg gccccatgga gcgaantcca aagtgtggat attgtcggtt taattcatcc 60
 caaaaagctga aatacgccaa aacccacgtt ccctaacatt ggtatcatgc ataatgacca 120
 cagccnttca gaaagctttg gcaaccagct ttcaaaatca tgggtaccgc ttcaaacgta 180
 tgcaaaccat caatatgaag cagatcaatg ctaccttgtg aaaaatgctc taacgcttgg 240
 tcaaatgtac tgcgaaatgag agtagaaaaa cctgaatagt gctgttgatt atattctgat 300
 acttgcctgt aaacttcttc gccatacagc cccgcatgtt catctcccccc ccaggtatca 360
 acggcaaagc agcatgtttc taaatctagt ttagagactg cttggcaaaa tgagaaataa 420
 gaacttccat aatgagttcc cagctcaaca atatttcttg gccgcagtgt gtcaactaac 480
 cagaaaagcaa aaggaatgtg ttctagccaa gcagattgtg caaggtatgt aggacaccan 540

aaaagagatg gttgaaaat gaaattcaat tccctgcaa tatcagtgtat gggatataac 600
 tcacgattct ctactaactg actaatttt tgactatcca ttgaggaaaa ctcacatgtat
 tttatagaat taaatcaaga aacctgaaaa tacctatagt gcggtaactt attaactaac
 atttaaatat taacaataca cttggaaata ttagttaaaa ataaatcatt atgatttctc
 atcaatcctg gtgctcacgc aaagttgcca gcccccataat aataagacca tagaacaagc
 aaagtaatac acccacagtc gcaagattat agaatcgccg tggatattcg gcatcttccg
 ctaaagttgg ttgggtaata accaataagat 930

<210> 113
 <211> 659
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (238)..(239)
 <223> n equals a, t, g, or c

<400> 113
 acgatatccc ccctctgctt ttgagaggca atctgcttta atacatgatt catcacaaca 60
 cctcttgctg cgcttgcatt ttaattttat atttttgggt agggaaaagt aattgcccct 120
 gatacggctc accatttacc aacgttcac agctatgttc cagagctaaa ttaagacctg 180
 gtagaatatc ccagcaattc accccttga cattttcaaa gctgtcataa gcaccggnnna 240
 agggggggcc aacatgttat acatggagca gccaatgata cgatattcaa agccctcttc 300
 cagttgcattc agatcctgct tggtaasgga ggaagagagg ccacgaatac gagagcgatg 360
 atgtgtatc ggcatacctg tgatatgaag atcattcaat tcaggtaaga agatgcaggaa 420
 ctcttgatgt ttccccctcgg tgtaaatgct gataccaatg ccccaactctt tgagcccaga 480
 gacaaagttt tctgtgccat caattggatc tagaacaatg taagaacctt tgggattcca 540
 ctcaatatct cctaaagggg ctaattcctc tgaaattagc acatgccctg gtagatgctt 600
 tctacagatg tcgaaaacta tatcttgaac ttttagatcc agtactgcgg ccgcgatcc 659

<210> 114
 <211> 556
 <212> DNA
 <213> Escherichia coli

<400> 114
 cccggatata catcaggaga aattggagca gcaattggat gcgccattaa tgcctggta 60
 gggatccccg catgtggca cgcaaattgc tcagaatatg atcgaccttc accagataaa 120

ccaaatctga gcgaaccatt tatcccaaga cccacgtatg acgcttcact tcattcctgg	180
catggcggat actgagtaaa tcatcctgaa tcattatgtt caacatcatc aattctccgg	240
acttgttgc agatgtccgg agaatattaa cctttcttc agaaacagaw tgatcaagaa	300
tcacactcct tcttaagag gattttatcc agaaaactga ctttcttcta tcaaaatmac	360
agtatcctgt tttatcagga ataatctta cctccggat cattccata atcagatatc	420
agaaaaatgt gccagtaatt ttttactgat gacttcaaac atttcacatt catcacacgt	480
cagattactc caaagttctt tcagatatgt gttctgcgcc agagtgagtc tctgaataaa	540
aaacataacct tcagac	556
<210> 115	
<211> 503	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (60)..(60)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (65)..(65)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (90)..(90)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (460)..(460)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (496)..(496)	
<223> n equals a, t, g, or c	
<400> 115	
tacctgtttg tggaaatttga cccagaagtg attcataccca cgactatcaa cgcgaccggn	60
gtgtncagcc acttcgtgct ctttggcgtn cgtagcgata gtcccatcg gggttattca	120
tcagctatcg gtatataaac cgaaagacat tgtcgattcc ggcaaccct tatccgggtg	180

ataaggat tattaccgaa gcgcgttcga aggctttcag gccatttca ccgaacccga 240
 tggtagggct cgctccatgc tattgcttaa tcattataat aaagagatta agcacagtgt 300
 gaagaataacc gagttccgca aactctaaaa cgaatccca aacagtgttt tgacattagc 360
 atccgtggtg gcagccagcc atgcggcatc ttctccacgc cagtgcgcaa tacgttgcaa 420
 aatatggggc agatgggctg gtcgttgcg ccggatgan ggcttggcg tgagatcgcg 480
 agggagcaga tacggngcat cag 503

<210> 116
 <211> 433
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (138)..(138)
 <223> n equals a, t, g, or c

<400> 116
 tttaacatca aaattacctg cagctgaaat gattttgctg atttcattaa ttaatggatt 60
 aagattaccc tgacttccat aggctaattgc atcattccca tacacataac ttgccttatt 120
 attactctgt tgatactnaa gtgcctttt aaggaaatct ggtgtgatta ccctgccgtc 180
 tttatcaaaa atctgctcta tctggtgatt agagatatac cctgactctt tttcaaacca 240
 gtttttaaat gtaataccat ttttggcc aatggaaaga acattacctt cagcttata 300
 catgatgagg tcattacctt ctgcctgaa ggccacatcc cggaaatcaa tatcagccaa 360
 actgagttt a cgtctttcc cccatcatc gtcaataata tgcgttccat atcctgaaag 420
 ataacgataaa ata 433

<210> 117
 <211> 302
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (280)..(280)
 <223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (299)..(299)
 <223> n equals a, t, g, or c

<400> 117

gcgctctgtt cccgttcctg ttcatcacca tcgcctgtgg tgcggtatct ggcttccacg 60
 cgctgatctc ttccggtacg acgccaaaac tgctggctaa tgaaacccgac ggcgcgttca 120
 tcggctacgg cgcaatgctg atggagtccct tcgtggcgat tatggcgctg gttgctgcgt 180
 ccatcatcga accgggtctt tacttcgcga tgaacacccc gcctgctggc cttggcatca 240
 ccatgcctaa cctgcatgaa atggggtggc gagaacgcgn cggattcatc atggcgcant 300
 ga 302

<210> 118
 <211> 656
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (628)..(628)
 <223> n equals a, t, g, or c

<400> 118
 aattaataag ccaaatacta catcacgtaa tacttgcaaa gaagtgcgtg gagtttgact 60
 aataatgggt ttgtccatta atacttaccc aaataatcgg ctcattatag caacgagcct 120
 ccgattaaaa tttaaaatac tcaatcattt aatagcaacg ttagcagcta cagcgatttg 180
 ataaataatt tgtgtgatat cttaaatga ttgcatggtt ttgctatcaa cctgaggtag 240
 aaccaatatac tgatcccccg gttgtacttt accttgccct tttaaattcta caagaccatt 300
 tgcgtgtaca atagcaattc gcttgcgtt agctcgctca gtaaaacctc cggcccatgc 360
 aacataatca tccaaattag catcgccatt atatactact gcttggca tcaacacttc 420
 accccccact tgaataagat cagtcttatt tggataact atttgcgccttctaa 480
 ttggatawtg gcaataacac ctatctgc aactactact ttaccaagcg gtkgaacttt 540
 acgagcctt ycaacaaaact gcatcaacta ctctgcttct ttagcacgta tattcgccctc 600
 accatcagat cgcgcggtg tggtaaantt catacggtcc aagcggttta gagatt 656

<210> 119
 <211> 436
 <212> DNA
 <213> Escherichia coli

<400> 119
 atatgttatac tggatccaga taaagagcgt tcttgaccgg ctatatccag acaggtcagt 60
 tacaccctgt ccggaaaaac tgatcgaaat aacaacagta tattttctaa tacactggca 120
 aatggtgccg gcggtgtggg gattcagctt ctggatagcg ctggtaatgc gggtgctgct 180

ggacagaaga aatatctggg acaggttagga ccatcaacat ctctcaatat tggattaagg	240
gcatctttag cactgaccaa tggacagact ccacctactc ccggacgagt tcaggcgta	300
gttgatgtta cttcgagta taatttagaa tgtcgggat gggctatccc cgatattatt	360
gcaggattag tctgtgatac agatatacag cccatatgaa caactgttg catatataaa	420
aatgatgata atttta	436

<210> 120
<211> 559
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (463)..(463)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (499)..(499)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (552)..(552)
<223> n equals a, t, g, or c

<400> 120 aataattaaa ttggggggta tcagtttct gataatgttc tgttattaaa acattatccc	60
atggggcgta gtttatataa ttagcaggat cttatgagtt aactaacatc agttttgaat	120
ttttaatggg ggttaatttat cttttactaa aaatatttta actattaata tagcatcatg	180
gttgttacgg tttgttttaa ttcttattta taatgtgcta tatattgtat ttttgtgctt	240
agataaaat attttttcat tacttttagtg atgttaatat tttgcgtgta gtaaaaatca	300
tttgttataac aaatgtcact gttgctatac tttgctgaac tgtttatcgg tcattttgat	360
tcaatcaactg gttctatatt tttaataac cgttctgttag cgattaatat attgctctcc	420
agaggataca ctatatgaaa tatattaaaa gtcattaatt ttnattcaat gttgtttaga	480
gttatgttca gtgtttggna ataggatgtg tttctaaacc gtcttgggtt ctataataaa	540
ttcttattctt anaggtttt	559

<210> 121
<211> 481
<212> DNA
<213> Escherichia coli

<400> 121
catgtccctt cctgaatact ggggagaaga gcacgtatgg tgggacggca gggctgcttt 60
tcatggtagag gttgtcagac ctgcctgtac tctggcgatg gaagacgcct ggcagattat 120
tgatatgggg gaaaccccgg tacggattta cagaatggtt tctccggacc tgaaagaaaa 180
ttcagcctcc ggctcaggaa ttgtgaattt aacagtcagg gtggAACCT tttctctgat 240
tcccggataa gggtagcttt cgatggcgtc cggggtaaaa cgccggataa gtttaattta 300
tccggcagg caaaaggcat taatctgcag atagctgatg tcagggaaa tattgcccgg 360
gcaggaaaaag taatgcctgc aataccattt acgggtaatg aagaagcgct ggattacacc 420
ctcagaattt tgagaacgga aaaaaacttg aagccggaaa ttattttgct gtctggatt 480
a 481

<210> 122
<211> 535
<212> DNA
<213> Escherichia coli

<400> 122
ccatatagtg acttcattga acaaaatgta aatggaatct tgctggagaa tgacccacat 60
atatggataa aagcttttc attactgtt agtgcagatc ataaacgtag cgagttggcg 120
ttcaatgcta aaaaatatgc ttgtaaaatt gtaggtgtcg agtaaaaaga tatttttatt 180
taatttgtgc tattgaatgt taaaaatcg aactgattgg tgtttaata ttaatcatag 240
gttatgatgc aaaaatataat taggcattgc ctgcttcaat taacttgaga gtgtaaatgg 300
aattgaaata tggttatatg ataaagcaat atatgttaat acatatgtca accgaaaaatg 360
ccattatgtg tttttactt tatctgtaac gacacaatataaaaataag gctaataatc 420
aaaacgcttt ttaatttgat tgtttgaat caagtgacta agaaattctc ttgctgcaa 480
taactccctt agtgattttt tttgagtcta ttttattctc tgggcatggc catgc 535

<210> 123
<211> 412
<212> DNA
<213> Escherichia coli

<400> 123
ccggccccat aatgatggtt ttatTAAGGT tagcgccgac ggTTTcgatg aacgatttca 60
ggTCGGTATC ttAAAATTG GCGGTGAAAG TGGCTTCTC CGCCCAgACC GGTGAACtGC 120
ataatGCCGC TGCCAGCACC AGCGGCAgTA AACGCTTTTGTTTGAGG CCAGTTGTCT 180
tcttacgcca gaccgacaac gtcatatcac gccaAAACAC gatgaatgat tctcctggat 240

taaatgcggtagcgcg cgatggaaat gtcgtggcgc gcacccttgc gtaaaaaccgt 300
 aagttgaatg gaatccattg aaggtaactg ccgcatacaga gcaatcattt ctcgtggatc 360
 agtggaaatcc tgctgatttgcgcaaatgc gatatcgcc tccttaaaac cg 412

<210> 124
 <211> 576
 <212> DNA
 <213> Escherichia coli

<400> 124
 tagcctgttc agcgttatatt tggatgaga agccaaagtgc gctttgggtgg tgtcccagcc 60
 caggttttta ttactgctgg ttatcacct ttcatgtttt tcaataaaagt tgtgactcag 120
 ttgaaatctg ctgtcaatgc taatatggga cttttttgtt atagacaagt gactccttt 180
 gcaactttta tagcacgttt tatgctagaa acaatgggtgg gcatgattgt cggataatc 240
 ctagtactag gattattgtg gtttggctt gatgcaatac ctgcggatcc attgcaagtg 300
 atccttggtt attctcttct gatgctgtt tcttttctc ttggattgtt attttgtgtt 360
 atttgttaatt krgcgaraga ggcagataaa tttcttagct tgttaatgat gcctttgatg 420
 tttatctctt gtgttatgtt tcctcttgct actattcccc ctcaatatca gcattgggtt 480
 tttatggaat ccacttgtgc atgctgtaga actaatccga agggcatggg atatctgggt 540
 tatcgtagtc ctgatgtaaatggcgtat ctgtcg 576

<210> 125
 <211> 132
 <212> DNA
 <213> Escherichia coli

<400> 125
 ttaccaagca ggatctgatg caactggaag aaggcttga atatcgatc attggctgct 60
 ccatgtataa catgttggcc gccgtacgcg gtgcctatga cagcttgaa aatgtcaaag 120
 gggtaattt ct 132

<210> 126
 <211> 542
 <212> DNA
 <213> Escherichia coli

<400> 126
 gattaggggt cactcaggat tataaaaaag cggcagaata ctataaaaaa ggtgataaaa 60
 ataatgatatacagcacaa taccgtctgg caaaacttta tgaacaaggtaaacgggttaa 120
 aacgtgatta tcaacaagcg ataaacctt accttaaaca tatcaacaga atggatcaca 180
 tcactgcccc cagttttgtg gctctgggtg atatctattc tctggattt gggtagaga 240

aaaacccaca actggctgaa aaatggtac aaaaagcgat agatgcagct aatacacaac 300
 ataaccagga aataaatcat taaacgacaa cacttaatac catattgtga agatgttcag 360
 acatggcggaa attcccstat tccttggcg cgttacaac agactatatt ccgcataatc 420
 tgtctttatt gtgtataaac catcgatact gatgttgat agtgctaaat aatcattggc 480
 gcaatcacaa agcctaattgc cactccagca ataattcccc ccaacccagg cagcataaat 540
 gg 542

<210> 127
 <211> 382
 <212> DNA
 <213> Escherichia coli

<400> 127
 gaaccacctta gcggcagcta tcgggaatcg cctgctgaaa gacggtcaga cagtgattgt 60
 ggttaccgtg gctgatgtta tgagtgcct gcacgccagc tatgacgatg ggcagtcagg 120
 cggaaaattt ttgcggAAC tgcgaagt ggatctgctg gttcttgatg aaattggcat 180
 tcagcgcgag acgaaaaacg aagcaggtgg tactgcacca gattgttgat cgccggacag 240
 cgtcgatgctg cacgtgggg trctgacaaa cctgaactat gaggccatga aaacattgt 300
 cggcgarcgg attatggatc rcatgaccat gaacggcggg cgatgggtga attttaactg 360
 ggagactggc gtccgaatgt cg 382

<210> 128
 <211> 126
 <212> DNA
 <213> Escherichia coli

<400> 128
 cgtcccgcac cggaaatgg tcagcgaacc aatcagcagg gtcatcgcta gaaatcatcc 60
 ttagcgaaag ctaaggattt ttttatctg aattctagcc agatccccgc tgatttatgc 120
 tggtta 126

<210> 129
 <211> 258
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (142)..(142)
 <223> n equals a, t, g, or c

<220>

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<221> misc_feature
<222> (205)..(205)
<223> n equals a, t, g, or c

<400> 129
accccccagcc tagctgggg ttttctgtgc acaaaaaatc ccggcataat ggccgggatt 60
tgcgagctt cccactattt ctgtatcct aaacggaaca tatcagttgg gaataaagg 120
tgtattatca cttcatcatt anaaatgaat aatttggcg ataaaagctgt tacgtcatag 180
atatttcag cgattaatct taganttgac ctaaaaaactg gaataacttgc atcatctgca 240
aagacaaaca tgtcatcg 258

<210> 130
<211> 399
<212> DNA
<213> Escherichia coli

<400> 130
aaccagcggt tcgcatcatc tcatcccact gactctccgc ttttgcacaga tctgcataatc 60
ctcgggcca cttatccagt actccgtagt ttgccgattt attcacccgc cagaacacccg 120
cctcacctgc atcggcaagc cggggggaaa actgataccc cagtagccag aacagaccga 180
aaataatatc gctgctaccc gcagtgtctg tcatgatttc aactggattc agccctgtct 240
gctgctcaag aagtccctcc agtacaaaaa tcgaatcccc taatgtaccg ggtaccacaa 300
tgccatggaa cccagagtac tgatcagata cgaattatac caggtgatgc ctcgtccaga 360
accaaaaatat tttctgttag atcctgagtt gatggtctt 399

<210> 131
<211> 745
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (297)..(297)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (323)..(323)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (330)..(330)
<223> n equals a, t, g, or c

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<220>
<221> misc_feature
<222> (335)..(335)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (715)..(715)
<223> n equals a, t, g, or c

<400> 131
aaataacatc aacatacatt tgactcgccg gggaaacgtt tacggagtct tcatactggc 60
actttttat gctgctgact actcttcgtc atcgccatca acatgcgcac gaatcagcgc
cataaacggt ttgccaaagc gttccagctt gcgcatccc acgccgttaa cgctgagcat 120
ttcgtggcg gtgatcggca tctgttcagc catctcaatc aagggtgcgt cgtaaacad 180
cacgtacggc gggacattac tttcateggc tatcgattt cgcagttgc gtaatnngc 240
gaacagtttgcgatcatagt tgnccgan cgatntctgc atcgcttgc gtttgagcgc 300
cacgatacgc ggcacggcaa ttgcaaagag gattcgccgc gcagcaccgg ggcgcggcc 360
tctgtcagtt gtagggcaga atgctggca atatttgcg tcaccaggcc gaggtgaatc 420
agctggcgga tcacgctcac ccaatgttca tggctttat cacggccat gccatagact 480
ttcagtttgt catgaccata gtcgccgata cgctggttat tagcaccacg aatcaactcc 540
accacataac ccataccaaa ccgctgattc acacgaccaa tggtgaaag ggcaatctga 600
gcacggttg aaccgtcgta ctgttcggc ggatcgaggc agatatcgca gttcnccgca 660
cggtcctga cggcccttcgc caaaa 720
745

<210> 132
<211> 439
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (108)..(108)
<223> n equals a, t, g, or c

<400> 132
agaatggcggttcttgccccccctttggcccggtcctgactagcatggctggagtccagt 60
gtccaggccacgaccatgctcatcatggaa gcagctttttagtacantc gcagcttatt
ttcctggaac gaaatgtctgcacatcggtgcataaacata acccccaatg cccagcagat 120
gcacagaagg ttctagaatc gcccactgat atccccataca aaatttacca aaacgtttc 180
240

gtatttctcg tataaataat gtctctatgg tgacgttcta gacttcaaac ccacttttg	300
aatttgcgtga tgtgctccta atctcttcag gaatgttaacg cccttggttt acagctacca	360
atacactgga ggtatactta tctgcaactg gatgaactag atgtacttga gcaaacattt	420
cataagctcg acgacagtt	439
<210> 133	
<211> 350	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (97)..(97)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (208)..(208)	
<223> n equals a, t, g, or c	
<220>	
<221> misc_feature	
<222> (335)..(335)	
<223> n equals a, t, g, or c	
<400> 133	
ctggaaagcg acgttgcgtgg attaatgcag tcggtaaaac tgaacgctgc tcaggcaagg	60
cagcaacttc ctgatgacgc gacgctgcgc caccaantca tggaacgttt gatcatggat	120
caamtcatcc tgcagatgg gcagaaaatg ggagtgaaaaa tctccgatga gcagctggat	180
caggcgattt ctaacatcgc gaaacagnac aacatgacgc tggatcagat ggcgcaccgtc	240
tggcttacga tggactgaac tacaacacct atcgtaacca gatccgaaa gagatgatta	300
tctctgaagt gctgtacaac gaggtgcgtc gtcgnatcac catcctgccg	350
<210> 134	
<211> 400	
<212> DNA	
<213> Escherichia coli	
<220>	
<221> misc_feature	
<222> (256)..(256)	
<223>	
<220>	
<221> misc_feature	

<222> (256)..(256)
<223> n equals a, t, g, or c

<400> 134
ccccaaaggatt gctaacaaat gcgcgttggcatgcccggat gcggcgtgac cgccttatcc 60
ggcctacgaa accgcaagaa ttcaatatata tcaggagcg gtgttaggcct gataagcgta 120
gcgawtcagg cagtttgcg tttgccgca accttagggg acatttagcg accccattta 180
tttctcactt ttccgcctca tcatcgcg ttaatttctt tcatgaatca cgctttacaa 240
tatccagcgc ggcanaacg gtactggcag ggatctgaat tttccctccag cagcacaatc 300
aaatcgacag ccagtttgcac atcgtaagg ggcattttcc cagtgacata atctctccat 360
tgctaagcgg gttaaaacgc gctaacctgt ttcgattttt 400

<210> 135
<211> 463
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (25)..(25)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (432)..(432)
<223> n equals a, t, g, or c

<400> 135
ctatccttat gaccacccaa ctacntcatt tacacccaaa ccagcgatct gaataaagaa 60
gcgattgccc agttacgact gggcgaaaa tgcgcttaag gatgaagtaa agtttcagtt 120
gagcctggca tttccctgtg gcgtggatt ttaggcccga actcggtgtt gggtcgtct 180
tatacgcaaa aatcctggtg gcaactgtcc aatagcgaag agtcttcacc gtttcgtgaa 240
accaactacg aaccgcaatt gttcctcggt tttgccaccc attaccgttt tgcaggttgg 300
actgcgcgat gtggagatgg ggtataacca cgactctaaa cgggcgttcc gacccgaccc 360
cccgcagctg gaaccgcctt tatactcgcc tgcgttgcaga aaacggtaac tggctggtag 420
aagtgaagcc gnggtatgtg gtggtaata ctgacgataa ccc 463

<210> 136
<211> 584
<212> DNA
<213> Escherichia coli

ESTIMATE OF THE NUMBER OF SITES

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<220>
<221> misc_feature
<222> (425)..(425)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (467)..(467)
<223> n equals a, t, g, or c

<400> 136
ttggtcagcc gtacctgaat gggggctgat gcccggtgg ttaatggcag gtggtctgat      60
cgccctggttt gtcgggttggc gcaaaaacacg ctgattttt catcgctcaa ggccggccgt      120
gtaacgtata atgcggcttt gtttaatcat catctaccac agaggaacat gtaggggtgg      180
tatcagtatt tggcagttat tgattattgc cgtcatcggt gtactgcttt ttggcaccaa      240
aaagctcggc tccatcggtt ccgatcttgg tgcgtcgatc aaaggctta aaaaagcaat      300
gagcgatgat gaaccaaagc aggataaaac cagtcaggat gctgattttt ctgcgaaaac      360
tatcgccgat aagcaggcgg atacgaatca ggaacaggct aaaacagaag acgcgaagcc      420
tacgntaaag agcaggtgta atccgtgtt gatatcggtt ttagcgnact gctattggtg      480
ttccatcatcg gcctcgctcg tctggggcgc caacgactgc ctgtggcggt aaaaacggta      540
gcgggctgga ttccgcgcgtt gcgttcactg gcgacaacgg tgca      584

<210> 137
<211> 527
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (108)..(108)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (191)..(191)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (510)..(510)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (513)..(513)

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<223> n equals a, t, g, or c

<220>
 <221> misc_feature
 <222> (525)..(525)
 <223> n equals a, t, g, or c

<p><400> 137</p> <p>gcaggcagga ggaactgccc agtgatacgg ttattcgtga tggcggaggg cagagcctta acggactggc gttgaacacc acgctggata acagagttga gcattggnta cacggggag ggaaagcaga cgttacaatt attaaccagg atgtttaccc agaccataaa acatggcgg ttggcaaccg naaccatcgta caacaccgtt gcagaagktg gtccggagtc tgaaaatgt tccagcggtc agatggtcgg agggacggct gaatccacca ccatcaacaa aaatggccgg cagttatctg gtctcgaaaa atggcacggg acaccctcat ttgcgttgtt ggtgaccaga cggtagacgg agaggcacat aacacccgac tggagggagg ttaaccagta tgtacacaac ggtggcacgg caacagagac gctgataaac cgtgatggct ggcaggtgat taaggaagga gggaaactgcc ggccattac caccatcaan ccngaaaagg gaaanct</p>	60 120 180 240 300 360 420 480 527
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<210> 138
 <211> 441
 <212> DNA
 <213> Escherichia coli

<220>
 <221> misc_feature
 <222> (440)..(440)
 <223> n equals a, t, g, or c

<p><400> 138</p> <p>gtcagtctct gggggaaatgt cgtgttccga ccggggaaat gtgggtggaga aagttattga aggggtttac gaggtgggtgg gggttttga ccggatttag gaaaagcgtg atgccccatgca gtcgctgatt ctgccgccac cggacgccag ggcgtggcac aggcggcaact gacttaccgt tatggtgacg aacmtcarcc cgtcaccacc gccgacattc tgacaccacg acgccgggar gattacggta aggacctgtg gagtgcttat cagaccattc aggagaatat gctgaaaggc ggaatttccg gtcgcagtgc cagagaaaaa cgtatccata cccgtgccat tcacagcatc gacaccgaca ttaagctcaa ccgcgcattt tgggtgatgg ctgaaacgct gctggagagt atgcgcgtat gcccgtttccn t</p>	60 120 180 240 300 360 420 441
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<210> 139
 <211> 398

<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (164)..(164)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (210)..(210)
<223> n equals a, t, g, or c

<400> 139
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ttaatctgcc gaaaccgcag caagggccgg aaaccattaa tcaggttacc gaggataaga 120
tgtcagctga gtaagcctgt atgccggata aggcgcgtcgcc gcncnattccg atgaaataag 180
gcccgcattcggg cctgaaggaa agccgtatgn atacacccgc agccgcattc cggcaagtta 240
caacaaataaa cctttaacca tgcttttga tgcttttca gaaatccccg cggcgatgcc 300
catactggca accgtcggga gggattgatc atcggcagtt ttttgaatgt ggtgatttgg 360
gcgttacccc atcatgctgc gccaacaaat ggccggagt 398

<210> 140
<211> 580
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (566)..(566)
<223> n equals a, t, g, or c

<400> 140
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aacaaaaaggc gaagaatggc aaatcctgcg atcagcaaag tcagcgcacc gactatctgt 120
aacatagtca ctccgtgatg aatatcatgt gtattgtgaa tgccagtgaa tgtggactg 180
aagcgtttgc acctgtccgg gtcccggtca tgatgaccgs aacagagaga caatgccgaa 240
ttatcagaag gtcacattca gtgtggcttgc gccgttataa ctttcagcgc tgctgccgt 300
gacgctgtgg gcataaccgg cctgaacgcc cagggtgata ttttccggaa cacgggcttc 360
cagtccggcc tgcagctcca gtgacgtgcc attccgggac ggtgagaacg tcatgttact 420
gccggctgcg gctgtaccca tgctcatgtc tccccgggag ctgaagggtgc ggataacaga 480
aggctgtacc cacccttca ccggcagttc acgcacactg tgtttgcac tgtcacgcaa 540

ggtgtcacgg gatgaggtgc cttcancaaa aggtcatatt 580

<210> 141
<211> 446
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (388)..(388)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (399)..(399)
<223> n equals a, t, g, or c

<220>
<221> misc_feature
<222> (415)..(415)
<223> n equals a, t, g, or c

<400> 141
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gcacatccag acggccgcca tttccagta cgacattatc agctttaccc tccacaacag 120
agaatgctcc caggcggtt gtgccggta cggttcagc agtgctggta accagtgc 180
cgccccgtt ctgggtgaca tcagacgctt taccgcccggc attcacctgc agctttcctt 240
tctgggtgat ggtggtatgc gcggcagttc ctcccttcatt aatcamctgc cagccatcac 300
ggtttatcag cgtctctgtt gccgtgccaa cgttgtgtac atactggta mctccctcca 360
gtcgggtgtt awgtgsctct ccgtgtancg tctggtcanc aacaacgcaa atganggtgt 420
cccggtccat ccccgaaagac cagtaa 446

<210> 142
<211> 327
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<222> (290)..(290)
<223> n equals a, t, g, or c

<400> 142
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atgagccgtt ggtgggtggc tctccgcaat ggcacgatga actggcaggt gccctgaata 120

atattgccgg agtcgcccac tgaccggtca gaccgggtatc agtgatgact ggccactgcc	180
ttccgtcaac aatggataacc tggttccgtc cacggaccccg gacagtccgt atctgattac	240
ggtgaaccccg aaactggatr gtctcgaca ggtggacagc catttgtttn ccggactgta	300
tgagcttctt ggagcgaaac cggtca	327